Prices of Engineering Materials

THE BUSINESS OUTLOOK

Overshadowing all other considerations was the flotation of the $100,000,000 New York City loan. The price paid by the city was very high. If the City of New York has to pay 6% for short-term accommodations, what can railroads and smaller municipalities expect? It may be taken for granted that the high price demanded by the bankers was to insure the success of the loan. This will have the effect of scaring off borrowers for all kinds of public improvements. The field of new construction will be linked more closely with the financial situation than ever before, and until funds can be obtained on more reasonable terms there will be a minimum of new ventures.

Railroads are doing next to nothing. Some important bridge projects on which work had already been started have been postponed. One railroad company, which has done a great deal of construction work in and around New York, has cut its engineering force in half. The reopening of the rate case is the one real hope in the railway field at present.

The iron and steel industry is less active than at any time, save the few months following the 1907 panic, and this comes after the steel industry has been operating from 65 to 75% of capacity for nearly two years.

The export field seems to have been overworked. To have something to sell is only half the problem. Merchants in the United States must arrange to buy; they must arrange to do business on a barter basis. Undoubtedly, sales to South America will increase decidedly, but the benefits for the present will be reached by those houses who established agencies in South America many years ago, who understand the people and the customs. It is an opportune time, however, to cultivate this trade, even though it be an expense to do so for a few years.

Price changes have been unimportant. The fall in tin was nearly as spectacular as the advance. Prices are now at the old level. Copper is lower, steel products are not as firmly held, and a definite cut has been made in tin plate. Quotations now are a matter of minor interest.

The situation in cotton-raising states is particularly unprecedented, for in that wide expanse of territory, cotton is the one staple on which all business hinges, and although the crop is enormous, it cannot yet be turned into money. Agricultural returns are particularly satisfactory and farmers are securing a high price for their products. The wheat belt seems to be exceedingly gratifying.

Orders for export have been received, particularly for munitions of war. These included 6,000,000 horseshoes, 50,000,000 rounds of ammunition, 10,000 saddles, and it is probable that 100,000 horses will be purchased in the United States and Canada in the next few months. In the next two months, the war in Europe should give a decided impetus to the manufacture of automobile trucks, but there will probably be more than a corresponding falling off in the number of pleasure cars sold.

The government is showing some willingness to help business, and it may be that the policy of hitting at every kind of business is past.

Idle freight cars have decreased, and about 95% of the total railway equipment is actively employed.

Efforts are being made to permanently establish, in the United States, industries which have always been carried on in Europe. It is evident that with an assured trade of two or three years, many lines of manufacture can be so firmly fixed that they will be able to resist foreign competition.

Labor is feeling the pinch. Some of the railways are paying less than earlier in the year, and good factory help is plentiful.

Labor

The supply far exceeds the demand. An increased efficiency can be expected from all classes of workers. The Brooklyn Rapid Transit, which is doing an unusually large amount of construction and repair work this year, is reported to be paying 17c. per hour for rough laborers. On subway work in New York City, $1.50 is paid for eight hours, and in Long Island the rate is $1.60. Immigration continues to fall off, but it is evident that there will be a large surplus of unemployed this winter.

A report has just been issued by the Department of Commerce which shows that there are 2,152,433 persons 10 years of age and over in New York City engaged in gainful occupations. The principal workers are distributed as follows: Manufacturing and mechanical industries, 40.6%; transportation, 7.9%; trade, 16.8%; public service, 1.9%; professional service, 5.9%; domestic and personal service, 15.5%; clerical operations, 10.9%, the remainder being distributed in miscellaneous occupations.

CRUSHED STONE, SAND AND GRAVEL

Crushed Stone—The market is lifeless and the following quotations are nominal at 90c. to $1 for 1½-in. stone, and 95c. to $1.10 for ¾-in. stone. These quotations are for full cargo lots of 500 cu.yd. delivered alongside of dock New York or Brooklyn.

Sand and Gravel—Gravel is quoted at 90c. for 1½ in., while special gravel for subway specifications is quoted at $1.15.

Sand sells at 50c. per cu.yd.

The above quotations are for full cargo lots of 500 cu.yd. delivered alongside of dock, New York. In Boston gravel sells at 35c. per cu.yd. at quarry 25 miles out, the freight rate to Boston being 40c.

Cement, Lime and Brick

Cement—The cement trade is only holding its own. Numerous inquiries have been received for export to South America, but the instability of ocean freight rates is one thing that is preventing any great business to those countries. For example, with a rate of $4 per ton quoted in the morning, advancing to $5 in the afternoon, the steamship company finally refused to do anything better than $10 per ton, and that not more than 48 hours afterward. There is an insistent inquiry, and no doubt considerable business will be transacted. In this country, work is being finished up as rapidly as possible, and no new work started, so that it is evident that the cement mills will face a lean winter. Then, too, the jobbers in New York who frequently stock up their supplies are refusing to place any orders this fall. Prices are unchanged at $1.58 per bbl. for delivery within lighterage limits, New York. This is equivalent to $1.46, Jersey City, and 95c. per bbl. in bulk at the mill. The quotations given below do not include the allowance of 40c. made for bags returned:

Boston	$1.32	Chicago	$1.15
Cleveland	1.30	Detroit	1.19
Duluth	1.38	Jersey City	1.06
Minneapolis	1.35	New York	1.18
Pittsburgh	1.10	St. Paul	1.35

Lime—Business is quiet, but prices are unchanged at 97c. per bbl. for state common, 200 lb. net; $1.37 for 300 lb. "Star"; $1.55 for 300 lb. finishing; $1.10 for 200 lb. finishing and $1.72 for 350 lb.

Plaster Blocks—Prices are without change, and the market is fairly active, quotations being as follows:

	Weight, per sq.ft., lb.	Price, per sq.ft., cents
2-in.	7	6
3-in.	8½	6½
4-in.	11	7¼

These blocks are made 32 in. long by 13½ in. wide, containing 3 sq.ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Brick—The market is the lowest in years, and even at that it is weak. Hudson River common brick sell at $5 to $5.50, New York. For desirable orders, even these low quotations could be shaded. Raritan River brick are $5.25 to $5.50. The number of brick sold this year is 20% less than those sold at the corresponding period last year, and 1913 was by no means a satisfactory year in the brick market.

IRON AND STEEL

Pig Iron—While the markets have barely held their own during the last eight weeks, there has been no great pressure to sell, and stocks are not large. This is the one redeeming feature of an otherwise most unsatisfactory market. Curtailment has taken place in so many lines, new construction has been nearly at a standstill, and the reduction to the irreducible minimum has been going on so long, that new buying is limited to positive needs. In the Cincinnati market, a sale of 200 tons is the only one mentioned in the report for the week. This is the market where transactions generally run from 1000 to 10,000 tons. Some of the New England foundries have tested the market for future shipment, but very few orders have been received for delivery in 1915. In fact, all blast furnaces are unwilling to make any quotations for such forward shipment. It is well to observe that the present pig-iron consumption is about 60% of normal.

Quotations for lots of 100 tons or over, ports named, are as follows: Cincinnati Southern Foundry No. 2, $13.25 to $13.75; Cincinnati Northern Foundry No. 2, $14.25 to $14.75; Cincinnati Northern Foundry No. 3, $14.00 to $14.25; New York Northern Foundry No. 1, $14.75 to $15; New York Northern Foundry No. 2X, $14.25 to $14.50; New York Northern Foundry No. 2 Plain, $14 to $14.25. Southern iron in the New York market is $14.25 to $14.50 for No. 2. Southern Foundry No. 2, Birmingham, $10.

Steel Rails—Business has been practically at a standstill. It is reported by a prominent official of the Carnegie Steel Co. that one of the railroads in Pittsburgh had not a single extra rail in stock. It is well known that many lines have drawn on their reserve stock to facilitate repairs, and have been taking up from sidings to be put into main tracks. The decision of the Interstate Commerce Commission to reopen the railway rate case will have a most important bearing on the future of the railways, for, unless there is some definite way by which the railways can be tided over the next year, there will be a list of railway receiverships which will be appalling. Prices for rails are nominal and unchanged, as follows.

These quotations are for lots of 500 tons and over: Standard sections of bessemer rails, $28; open-hearth rails, $30. These quotations are f.o.b. Pittsburgh: Girder rails, 30-ft. lengths, $36.40 per gross ton, and in 60-ft. lengths, $38.40, both f.o.b. New York. Other quotations, f.o.b. Pittsburgh, for large lots are as follows: Standard sections, $1.25; 25- to 45-lb. sections, $1.15; 16- and 20-lb., $1.20; 12- and 14-lb., $1.25; 8- and 10-lb., $1.30. Rerolled light rails are one to two dollars less per ton than previous quotations.

Structural Shapes—Bridge work, as far as new projects are concerned, is practically a thing of the past. Most all of the work projected is held up, due to lack of funds. In the building line, there is some work going on in all parts of the country, but it is very much smaller than anything in recent years. New York has more inquiries than any other

part of the country, and there are inquiries for a thousand tons for a club building, 6500 tons for an addition to the Grand Central Station, and a few small structures. Building materials have been shipped abroad, and it is doubtful if any large amount of structural shapes will go in the very near future. Prices show no change, compared with last month, the base being $1.20 to $1.25, Pittsburgh, for I-beams, 2 to 15 in.; channels, 2 to 15 in.; angles, 2 to 6 in., and V's, 3 in. and over. For other sizes, $1.30 to $1.35 is demanded. For T's, $1.25 to $1.30; channels and T's under 3 in., $1.30 to $1.35; handrail T's, $1.95 to $2.10. Cutting to specified lengths is charged at the following rates: Under 3 ft. to 2 ft., inclusive, 25c. per 100 lb.; 2 ft. to 1 ft., inclusive, 50c. per 100 lb. Cutting to lengths under 1 ft., $1.55. No charges made for cutting to specified lengths over 3 ft.

Track Supplies—Standard railroad spikes are $1.50 to $1.63; track bolts, $1.90 to $2; angle bars, $1.50. All these prices are per 100 lb. in large lots. Tie plates are $25.50 to $26 per net ton, f. o. b. mill.

Railroad spikes.	Cents
3, 3½, 4 4½ and 5x½	Extra .10
3½, 4 and 4x⅝	Extra .20
3, 3½, 4 and 4½x⅝	Extra .30
2½x¾	Extra .40
2½, 3 and 3½x⅞	Extra .60

Plates—Business is more unsatisfactory in this line than almost any other. Scarcely any of the mills are running at more than 50 per cent. of capacity, and many of them a great deal less. The price seems to be fairly firm, $1.20 Pittsburgh, but this is nominal, for there is practically no new business. All the car orders that have been made in several months have been cancelled, and there seems to be little prospect of new orders until financial conditions materially improve. Quotations are unchanged at $1.20 Pittsburgh, or $1.38 from mill in the Chicago district. For delivery from warehouse, Chicago, $1.75 is demanded.

Pipe—The market is at a standstill. The Standard Oil Co. for a time refused to take more than one-third of the flow of certain wells, but recently signified its willingness to buy up two-thirds. This, of course, is no incentive to increase production, nor to build new pipe lines. Until conditions improve, so that there is a better demand for oil, the market for line pipe will be extremely quiet. Some of the pipe mills are not running at more than 30 or 40% of capacity. The smaller sizes of pipe are just as dull as any other, but on all, discounts are firmly maintained. These discounts are as follows:

	Black	Galvanized
¾- to 2-in. steel butt welded	80%	71½%
2½- to 6-in. steel lap welded	79%	70½%
7- to 12-in. steel lap welded	76%	65½%

At these discounts the net prices of pipe per foot at Pittsburgh are as follows:

Diameter	Cents Black	Cents Galvanized	Diameter	Cents Black	Cents Galvanized
¾-in.	2.30	3.27	5-in.	31.00	43.60
1-in.	3.40	4.85	6-in.	42.00	56.80
1¼-in.	4.60	6.50	7-in.	57.00	80.00
1½-in.	5.50	7.80	8-in.	60.00	86.00
2-in.	7.40	10.50	9-in.	84.50	$1.19
2½-in.	12.20	17.30	10-in.	99.00	$1.42
3-in.	16.00	22.60	11-in.	$1.12	$1.60
4-in.	22.90	32.30	12-in.	$1.22	$1.74

Cast-Iron Pipe—Going back during the last dozen years, there is no record of lower prices for cast-iron water pipe than those which are prevailing at present. In New York the market is quoted at $20.50 to $21 per net ton at tidewater. There are only a few inquiries in the market. Pipe mills are outputting from 50 to 75% of capacity.

Quotations are as follows, Birmingham, 4-in. $20.50, 6-in., $21.50.

In Chicago, 4-in. $26; 6 to 12 at $24; 16-in. and upward, $23.50. All these quotations are per net ton, and a dollar extra is demanded for gas pipe.

Piling, Steel Sheet—The demand is exceedingly small. The prices are unchanged on a basis of $1.60, Pittsburgh.

Sheets—Inquiries for light galvanized sheets are fairly active. Sheet steel constitutes one other form, for construction varies within relatively narrow limits. The advance of $2 per ton which was made on all products early in August applies to sheets as well. For a few days there was a flurry, due to a feeling that the price of spelter might go to unusually high figures and so seriously affect the market for galvanized sheets. This, however, turned out to be only a flash in the pan. The price of that metal is again normal.

The following quotations are for large lots of sheets in Pittsburgh, and small lots from store, New York.

	Cents per Pound — Large lots Pittsburgh		Ware house delivery New York	
	Black	Galv.	Black	Galv.
No. 10	1.65	2.00	2.25	
No. 12	1.65	2.10	2.50	2.85
No. 14	1.70	2.10	2.35	2.85
No. 16	1.75	2.25	2.45	2.95
Nos. 18 and 20	1.80	2.40	2.50	3.10
Nos. 22 and 24	1.85	2.55	2.55	3.25
No. 26	1.90	2.70	2.60	3.40
No. 27	1.95	2.85	2.65	3.55
No. 28	2.00	3.00	2.70	3.70

Freight Rates—The freight rates in cents per 100 lb. on finished-steel products, from the Pittsburgh District, including plates, structural shapes, merchant steel and iron bars, pipe fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows: Baltimore, 14½; Canandaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 28; Denver, Colo., 85½; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; and Washington, 14½.

Wire Rope—Revised discounts are 47 and 2½% from list for galvanized and 55 and 2½% for the bright. At these discounts the net price of wire rope at the mills is as follows:

Diameter in inches	Price per foot — Cast steel	Crucible steel	Plow steel
2½	$0.76	$0.91	$1.08
2¼	0.62	0.73	0.86
2	0.50	0.58	0.68
1¾	0.39	0.48	0.56
1½	0.29	0.35	0.40
1¼	0.20	0.24	0.28
1	0.14	0.16	0.19
¾	0.09	0.10	0.11
⅝	0.06	0.07½	0.08

Steel Shapes—Quotations from warehouse New York are unchanged from last month as follows:

Refined iron.	Cents Per lb.
1 to 1⅞ in., round and square	1.80
1½ to 4 in. x ⅜ to 1 in.	1.80
1½ to 4 in. x ¼ to ⅛ in.	2.00
Norway bars	3.20
Burdens bar iron	3.15
Soft steel:	
¾ to 3 in., round and square	1.80
1 to 6 in. x ⅜ to 1 in.	1.80
1 to 6 in. x ¼ and ⅛ in.	1.95
Rods—⅝ and 1⅛ in.	1.90
Bands—1½ to 6x⅛ in. to No. 8	2.10
Beams and channels—3 to 15 in.	1.85
Angles:	
3 in. x ¼ in. and larger	1.85
3 in. x ⅛ in. and ⅛ in.	2.30
1½ to 2¾ in. x ⅛ in. and thicker	1.95
1½ to 2½ in. x ⅛ in.	2.05
1 to 1¼ in. x ⅛ in.	2.05
1 to 1¼ in. x ⅛ in.	2.10
1½ to 2½ x ¼ in.	2.00
1½ to 2½ x ⅛ in.	2.10
3 in. and larger	1.90

Old Material—The market is exceedingly quiet, few of the dealers doing even a routine business, and few trades, if any, are made. The following quotations are more or less nominal in the absence of sufficient business to give a clear indication of the market. They are per gross ton in New York:

	Per Net Ton
Heavy-melting steel scrap	$8.00 to $8.50
Pipes and flues	8.00 to 8.50
No. 1 railroad wrought	10.00 to 10.50
Stove plate	7.50 to 8.00
Malleable cast	7.25 to 7.75
No. 1 machinery cast	10.25 to 10.75
No. 1 yard wrought long	8.25 to 8.75
Wrought turnings	6.00 to 6.50

In Chicago, the situation is even more unsatisfactory. The supply is far in excess of any possible demand for the present, and prices are down to the lowest figure in years. Late in July it was believed that the market was about at its minimum, but since then prices have declined fully a dollar a ton. The following quotations are for delivery at buyer's works, Chicago or vicinity:

	Per Gross Ton
Heavy-melting steel scrap	$9.00 to $9.25
	Per net ton
No. 1 railroad wrought	8.00 to 8.25
No. 2 railroad wrought	7.75 to 8.00
No. 1 cast scrap	9.00 to 9.50
Pipes and flues	5.75 to 6.00
Agricultural malleable	7.50 to 7.75
Railroad malleable	8.25 to 8.50

While there is no strength in the Pittsburgh market, it is less weak than any of the others, and rolling mills seem to be taking scrap fairly actively. Some quotations are lower than they were in July, but others are practically unchanged.

Quotations per gross ton are as follows:

Heavy-melting steel scrap	$11.00 to $11.25
Re-rolling rails	12.75 to 13.00
No. 1 foundry cast	11.50 to 11.75
Old car wheels	11.25 to 11.50
Machine shop turnings	7.75 to 8.00
Railroad malleable	11.00 to 11.25

Chain—Prices are steady and without change, as follows: These prices are per 100 lb., f.o.b., Pittsburgh:

⅛ in.	$7.50	½ and ⅝ in.	3.00
¼ in.	4.95	⅝ and ¾ in.	2.90
⅜ in.	3.95	¾ and ⅞ in.	2.80
½ in.	3.40	⅞ and 1 in.	2.70
⅝ in.	3.20	1 to 1¼ in.	2.60

EXTRAS TO ABOVE LIST PER 100 POUNDS

	For BB	For BBB
⅛-in. and ¼-in.	$1.50	$2.00
⅜-in. and larger	1.25	1.75

Switch Points—The following prices are named f.o.b., mill, for switch points in lots of ten or more pairs: for 60-lb. rail, 10-ft. points, $16.25; 15-ft. points, $17.50; for 70-lb. rail, 10-ft. points, $18; 15-ft. points, $25, for 80-lb. rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, $33.50. All of the above are furnished with three rods, except the 10-ft. points for 60- or 70-lb. rail, which have only two.

Lag Screws—The price of lag screws is lower. Cone point lag screws are sold at a base discount of 80% and 5% from list. The net prices are as follows:

Length	Diameter in inches — Net per 100		
	½ in.	¾ in.	1 in.
3½ in.	$1.99	$2.02	$4.18
4 in.	1.06	2.15	4.43
4½ in.	1.05	2.28	4.68
5 in.	1.19	2.35	4.92
6 in.	1.33	2.68	5.42
7 in.	1.51	2.95	5.91
8 in.	1.60	3.21	6.35
9 in.	1.74	3.48	6.90
10 in.	1.78	3.74	7.39
11 in.	2.01	4.01	7.89
12 in.	2.15	4.36	8.38

Frogs—For mill shipments of ten or more, prices are as follows: Bolted frogs, No. 7, for 60-lb. rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs, No. 7, riveted to ⅝-in. plate for 60-in. rail, $18; for 70-lb. rail, $20; for 80-lb. rail, $21.50; No. 8 frogs bolted to a ¾-in. plate for 90-lb. rail are $25.50; for 100-lb. rail, $27.50.

Spiral Riveted Pipe—Prices are without change. The following quotations are f.o.b. factory, freight equalized with New York, being figured at a discount of 50, 10 and 10% from list. These are for orders amounting to approximately $250. For large orders, prices are cheaper by 12½ to 20%.

Diameter in in.	*Thickness Birmingham wire gage	Net price per 100 ft. With bolted joints complete — Plain	Asphalted	Galvanized
4	18	$19.76	$21.48	$30.74
5	18	23.40	23.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	50.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.30
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269 21
24	12	219.92	231.07	293.99
26	10	280.20	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	399.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

Wire—Wire business has been cheered considerably on account of the war. There is an inquiry for 5000 tons of barbed wire for shipment to Russia, and quite a little for shipment to Canada. Most of the mills are asking $1.35 to $1.40 for plain wire, $2 for galvanized barbed wire, and $1.60 for painted barbed wire, all f.o.b. Pittsburgh.

Nails—Carload lots of wire nails are quoted at $1.60 Pittsburgh. There are very few new orders.

Coke—Prices continue to decline with the falling off in the demand. The best grades of blast-furnace coke sell at $1.60@1.65 for prompt delivery and $1.75@1.85 per net ton for contracts. For 72-hr. foundry coke, $2@2.10 can be done for spot and $2.15@2.25 on contract.

METALS

Copper—Trade has not been so dull in years. Curtailment of production is now general at all of the principal mines, and will continue to be more so unless there is a decided change. It is evident that new levels for copper quotations must be established for years to come at a lower rate. For years, it was generally agreed that copper under 15c. per lb. was cheap, and many manufacturers would have been willing to see the market on a 15c. basis. Conditions have now changed. The electrical industry, which has consumed fully 50% of the copper output, has received a serious setback, and will not be as active again for years. In the meantime, the supply of copper far exceeds the demand, and of necessity the mines which produced metal at a high cost must go out of business. Future prices of copper are likely to be around 12c. There is practically no business now and no established market, but enough is known of the situation to warrant a quotation of 11⅞c. for large lots of electrolytic. Lake copper is in relatively fair demand, particularly Calumet & Hecla brands, which have been freely bought by manufacturers of cartridges in New England who have use for that metal. It is significant to note that copper in Germany is selling at about 19c. per lb. The German importations of copper have been the mainstay of the American market for years, and now that is absolutely cut off.

Tin—Large shipments of tin are being sent to this country and the supply is now far in excess of the demand. The market is more or less irregular, but frightfully dull. Less business was transacted in the last week than similar periods for years past. Quotations are more or less nominal, and it seems probable that a 30c. level, to which prices seem to be drifting, will be a maximum rather than a minimum quotation.

Lead—The market is easier, lead being obtained in New York at 2.75c. and in St. Louis at 3.60c. There is no need of exporting lead to Great Britain or France, as the supply formerly went to Germany, but is now being diverted to Great Britain.

Spelter—The market has again declined and is about at the old low quotation. In New York, 5.35c. is asked, and in St. Louis 5.20c. The foreign demand is small, but has shown some improvement due to the lower quotation.

Antimony—The market is exceedingly quiet and the quotations to jobbers are more or less fictitious, but they ask 11c. for Cookson's and 10c. for Hallett's.

Miscellaneous Metals—The following quotations are per lb. for small lots, but they may be shaded for desirable orders:

Bismuth	$4.00
Brass tubes, iron-pipe sizes:	
½-in.	.17
¾- to 3-in.	.16
3½-in.	.16
4-in.	.17
Brass rods	.14⅛
Brass sheets	.14⅜
Solder, half and half guaranteed	.26
Zinc sheets	9 to 9½
Copper sheets, base	.17½
Pig tin (five-ton lots, cash)	.33

Old Metals—The following quotations are for small lots delivered at buyer's warehouse:

	Cents
Copper, heavy and crucible	11.00
Copper, heavy and wire	10.75
Copper, light and bottoms	10.00
Brass, heavy	7.50
Brass, light	5.75
Heavy machine composition	10.00
Composition turnings	9.00
Lead, heavy	3.40
Lead, tea	3.15
Zinc scrap	3.75

REINFORCING MATERIALS

Bars, Concrete Reinforcing—Prices are steady but the volume of business continues to diminish. Quotations are as follows:

Size	Cents per pound — Mill shipments Pittsburgh	Warehouse Pittsburgh	Delivered from warehouse New York
¾-in. and larger	1.20	1.70	2.30
⅝-in.	1.25	1.70	2.35
½-in.	1.40	2.00	2.35
⅜-in.	1.50	2.10	2.50
¼-in.	1.80	2.35	2.80

Triangle Mesh—Quotations are without change as follows:

PRICE PER 100 SQ.FT.

Style No.	Cross sec. area per ft. width	Plain material — Carload lots	Less than car lots and over 10,000 sq.ft.	Galvanized — Carload lots	Less than car lots and over 10,000 sq.ft.
*4	0.102	$1.00	$1.23	$1.12	$1.34
5	0.077	0.80	0.97	0.89	1.00
6	0.058	0.63	0.77	0.71	0.84
*7	0.041	0.49	0.60	0.55	0.66
*23	0.170	1.69	2.05	1.88	2.24
24	0.142	1.46	1.77	1.62	1.93
25	0.124	1.29	1.57	1.43	1.71
*26	0.110	1.17	1.42	1.30	1.55
*27	0.085	0.96	1.17	1.07	1.28
28	0.066	0.80	0.97	0.89	1.06
29	0.049	0.66	0.80	0.73	0.87
31	0.261	2.49	3.02	2.76	3.29
32	0.225	2.16	2.62	2.40	2.86
33	0.196	1.93	2.34	2.14	2.55
34	0.146	1.48	1.80	1.64	1.96
35	0.109	1.117	1.42	1.30	1.55
36	0.075	0.87	1.05	0.97	1.15
38	0.380	3.55	4.30	3.93	4.68
*39	0.325	3.05	3.70	3.38	4.03
40	0.283	2.68	3.25	2.97	3.54
41	0.208	2.05	2.48	2.27	2.70
42	0.151	1.55	1.88	1.72	2.05
*43	0.101	1.10	1.34	1.23	1.46

*This material is made in regular widths of 18, 22, 26, 30, 34, 42, 46, 50, 54 and 58 in. Standard lengths in rolls are 150, 250, 300 and 600 ft.

CLAY PRODUCTS

Sewer Pipe—Prices are unchanged, the discounts being as follows: 24-in., 80%; 27- and 30-in., 70%; 33- and 36-in., 65%. At these discounts the net prices per ft. in New York are as follows:

Size		Size	
3-in	$0.05	18-in	$0.38
4-in	0.15	20-in	0.45
5-in	0.08	24-in	0.60
6-in	0.08	24-in	0.65
8-in	0.11	27-in	1.35
10-in	0.16	30-in	1.65
12-in	0.20	33-in	2.20
15-in	0.27	36-in	2.45

Flue Lining—Discounts are unchanged at 83% from list. At this discount, the net prices per foot for New York delivery are as follows:

	Weight in lb.	Price per ft.		Weight in lb.	Price per ft.
4½x8½-in....	14	$0.59	8½x18-in....	45	$0.152
4½x13-in.....	20	0.076	13x13-in.....	45	0.145
7½x7½-in....	15	0.068	13x18-in.....	57	0.22
8½x8½-in....	18	0.076	18x18-in.....	75	0.34
8½x13-in.....	28	0.11			

Hollow Tile—Prices are firm, with a steady market. Quotations, f.o.b., Perth Amboy, N. J., are as follows:

	Price per block		
Size	Hollow wall tile	Size	Interior partition block
4x12x12-in.	$0.06	2x12x12-in.	$0.048
6x12x12-in.	0.084	3x12x12-in.	0.048
8x12x12-in.	0.102	4x12x12-in.	0.052
10x12x12-in.	0.12	6x12x12-in.	0.072
12x12x12-in.	0.15	8x12x12-in.	0.096

MILL SUPPLIES

Belting prices are lower. Discounts on leather belting are as follows: Extra heavy, 50@50 and 5%; heavy, 50 and 10@60%; medium, 60 and 5@65%; standard, 60 and 10@60, 10 and 10%. The discounts applying to rubber belting are as follows: Standard, 60 and 10@60, 10 and 10%; best grades, 50@50 and 10%. The net prices per foot of rubber belting given below are figured at the discount of 50 and 10%.

RUBBER BELTING, NET PRICE PER FOOT

	2-Ply	4-Ply	6-Ply	8-Ply
3	$0.10	$0.14	$0.21	....
4	.13	.-9	.28	....
5	.16	.23	.35	....
6	.19	.28	.42	$0.56
7	.23	.33	.49	.66
8	.26	.38	.57	.76
9	.30	.43	.64	.85
10	.34	.48	.72	.96
12	.41	.58	.88	1.17
14	.49	.69	1.04	1.38
16	.56	.80	1.20	1.61
18	.63	.91	1.36	1.82
20	.71	1.02	1.52	2.03
22	.78	1.13	1.70	2.27
24	.88	1.26	1.89	2.52
26	.97	1.38	2.08	2.77
28	1.06	1.51	2.27	3.02
30	1.15	1.64	2.46	3.27
34	1.33	1.89	2.83	3.78
38	1.51	2.14	3.21	4.28
42	1.69	2.39	3.59	4.79
46	1.87	2.65	3.97	5.29
50	2.05	2.90	4.35	5.79
56	2.32	3.28	4.91	6.55
60	2.50	3.53	5.29	7.06

Shafting—The mills are not operating to more than 30 or 40% of capacity. The price for large lots is 66% discount from list. At this discount, the net prices per foot of cold-drawn steel shafting in Pittsburgh are as follows:

Diameter in inches	Cents per foot	Diameter in inches	Cents per foot
¾	2.80	2	23.00
1	4.97	2¼	23.00
1¼	7.72	2½	28.36
1⅜	9.44	2¾	34.31
1½	10.20	3	41.90
1⅝	11.97	3½	61.04
1¾	13.87	4	86.70
1⅞	15.96		

Lubricating Oils—Prices are easier due to overproduction. For delivery in New York in 5-bbl. lots, prices are as follows:

Neutral oils, filtered:

	Cents per gal.
*Cylinder, dark	19@23
*Cylinder, steam refined	13@19
Neutral oils, filtered:	
Stainless, white, 32 to 34 gravity	26@28
Lemon, 33 to 34 gravity	16@16
Dark, 32 gravity	14@16
Crank case oil	14@16

*Prices are according to test.

OILS AND PAINTS

Petroleum Products—The steady decline in the price of crude and refined products bring quotations to a level comparable with that of 1910. In many districts, the slump has been so severe that drilling has been stopped. A feature of the situation is the resumption of exports on a large scale. The prices paid by refiners for crude oil at the wells are as follows:

Pennsylvania, Second Sand and Tiona, $1.45; Mercer black and New Castle, $1.02; Corning, 85c.; Kansas and Oklahoma, 55c. California are as follows: 21 to 23.9 gravity, 40c.; 24 to 26.9 gravity, 42½c.; 27 to 28.9 gravity, 45c.; 29 to 30.9 gravity, 55c.; 31 to 32.9 gravity, 60c.

Auto naphtha, in steel barrels, delivered to garages in New York, is 13c.

Linseed Oil—Prices are higher and city raw in New York is quoted at 56@57c. per gal.; out-of-town raw is 55@56c. The usual advance of 1c. per gal. is charged for boiled oil.

Spirits Turpentine—Prices are quoted higher, but these are meaningless, for there is no business. The price is 48c. per gal. in New York.

Paints—The demand is slow and the following prices are nominal. Quotations in New York are as follows: White lead in oil, in 100-, 250- and 550-lb. kegs is 7¼ to 7½c. per lb., in 25- and 50-lb. kegs, 7¾c. per lb. Red lead and litharge in 100-lb. kegs is 7 to 7½c. per lb.

Hydrex preservative paint is 75 cents per gal. in [illegible] lots, New York City.

Colors in oils are quoted at the following prices per [illegible] Lamp black, 12 to 14 cents; Chinese blue, 36 to 46 cents; Prussian blue, 32 to 36 cents; Van Dyke brown, 11 to [illegible] cents; Chrome green, 12 to 16 cents; Raw or Burnt Sienna, [illegible] to 15 cents; Raw or Burnt Umber, 11 to 14 cents.

LUMBER

The markets have been hard hit by the war, and prices are low. The Pacific Coast trade which has been in bad shape for years has benefited a little by the opening of the Panama Canal. Hardwoods are very dull but prices are only slightly lower. Spruce and hemlock are dull but show only slight recessions in price. There is much irregularity in quotations for while one mill may have stock another may be obliged to buy. The same material and often variations as much as $5 per thousand are found.

MISCELLANEOUS

Lighterage Limits—The free delivery or "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry, south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jerome Ave. Bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City, points on the north and east shores at Staten Island, between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Erastina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Pot Cove, Astoria, Long Island City.

Asbestos—Asbestos building felt and sheathing in less than ton lots is 3½c. per lb. for the light, weighing from 6 to 30 lb. per 100 sq.ft.; 4c. per lb. is charged for the heavy, weighing from 45 to 56 lb. per sq.ft.

Millboard is made in standard sheets, 40x40 in., and 41x40 from 2 to 27 lb. per sheet. The net price in 100-lb. lots is 5c. per lb.

Asbestos wood, used for fireproofing, ventilators and smoke jacks, comes in sheets, 36x48 in., 42x48 in. and 42x96 in. The prices per sheet, f.o.b. factory, in New England, are as follows:

Thickness	Weight, pounds	Price	Thickness	Weight, pounds	Price
⅛-in.	1	$0.08	⅝-in.	5	$0.40
3/16-in.	1½	0.12	¾-in.	6	0.44
¼-in.	2	0.16	⅞-in.	7	0.48
5/16-in.	2½	0.20	1-in.	8	0.52
⅜-in.	3	0.28	1¼-in.	10	0.56
7/16-in.	3½	0.28	1½-in.	12	0.64
½-in.	4	0.32	1¾-in.	16	0.72
9/16-in.	4½	0.36	2-in.	16	0.80

Asbestos sheathing, corrugated, sells at 15c., per sq.ft. f.o.b. mill eastern Pennsylvania.

Telegraph Wire—The demand for telegraph wire has been fair. For lots of fair size, the wire measured in Birmingham wire gage, prices are as follows: "Extra Best," Nos. 6 to 9, 4⅝c.; Nos. 10 and 11, 4½c.; No. 12, 4⅝c.; No. 14, 5⅛c.; "Best Best" Nos. 6 to 9, 3½c.; Nos. 10 and 11, 3⅝c.; No. 12, 3½c.; No. 14, 4c. Actual freight is allowed from Trenton, N. J., where it does not exceed 25c. per 100 lb.

Explosives—Dynamite of the kind generally used by contractors is approximately 11@13c. per lb., f.o.b. factory, in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20@1.40 per keg of 25 lb. in lots of 10,000 lb.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 25 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7@8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

Chain Belting—Prices continue unchanged. Quotations are as follows: From 3 hp. to 10 hp., 30-in. centers complete with two sprockets, $7@8 per horsepower. From 10 hp. to 25 hp., 36-in. centers complete, $5@6 per horsepower. For 25 hp. to 100 hp., 56-in. centers complete, $4@5 per horsepower. From 100 hp. to 500 hp., 72-in. centers complete, $3@4 per horsepower.

Resumption of Export Trade—The war seriously curtailed exports from the United States during August, but they have now been resumed on a large scale from New York. For the week ending Sept. 26, the exports from New York were $20,032,000, compared with $16,810,000 in the corresponding week last year. In the week ending Aug. 27, exports fell to the low figure of $8,477,000, but since that date there has been a steady gain. The exports from New York since Jan. 1 aggregated $640,107,000, compared with $649,181,000 in the corresponding time last year.

Old Dry Goods Firm to Move—The firm of Arnold, Constable & Co., for many years located at 881 Broadway, New York, N. Y., has leased property at Fifth Ave .and 40th St., owned by Frederick W. Vanderbilt. The dry goods firm will erect a six-story building on the leased site for its exclusive use. The moving of this company untown marks the removal of the last of the well known firms from the 18th St. district to the new uptown center.

CATALOGS WANTED

Rogers Deland French, Lecturer in Municipal Engineering, McGill University, Montreal, Canada, would like to receive catalogs and other literature from manufacturers of sewer pipe, steel sheet piling, castings, trenching machinery, and other apparatus and supplies used in sewer construction. These to be used in the course in municipal engineering at the university.

Construction News

Items in the several departments are grouped according to states, which, in turn, are arranged geographically in the following order: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Tennessee, Kentucky, Ohio, Indiana, Michigan, Illinois, Wisconsin, Iowa, Minnesota, Kansas, Nebraska, South Dakota, North Dakota, Wyoming, Montana, Missouri, Arkansas, Texas, Oklahoma, Colorado, New Mexico, Idaho, Utah, Nevada, Arizona, Washington, Oregon, California.

★Denotes work advertised in ENGINEERING NEWS.

✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

Pan American Trade—A Warning

A special news memorandum of caution and warning regarding the Latin American commercial situation has been prepared by John Barrett, Director General of the Pan American Union, the international organization maintained in Washington by all the American republics for the development of commerce, intercourse, good understanding and peace.

The widespread and unprecedented public interest in the Latin American commercial opportunity as developed by the European war is being followed by so much misconception, in many circles, of the real trade and economic conditions obtaining in certain parts of Latin America, that Director General John Barrett of the Pan American Union in Washington has found it necessary to ascertain by cable the exact business situation in Latin America, and, as a result, to sound, in justice both to the United States and Latin America, a note of caution and warning.

On August 8, immediately after the outbreak of the European war, Director Barrett addressed a memorandum to the commercial and financial interests of the United States urging them to prepare to meet the combined responsibility and opportunity presented in Latin America by the war. This statement attracted general attention and discussion, but now a new phase of the situation, as indicated by these cable reports, has developed and is requiring careful consideration.

"These advices," he states, "emphasize that what is needed at this hour in Latin America is not so much a supply of the manufactured products of the United States, although required in considerable quantities, but money, loans and advances, credits on purchases, and markets at reasonable rates for raw products which usually go to Europe. If Latin America can sell at a fair figure her accumulating raw products and buy, in turn, through receiving financial help and coöperation in the form of advances and credits from United States exporters, importers and bankers, the situation will be speedily remedied and the commercial interests of the United States and Latin America will truly enter upon a new era of Pan American commerce and comity.

"The fact that the twenty Latin American countries last year bought imports and sold exports to the vast total of $3,000,000,000, of which $2,000,000,000 were transactions with Europe, proves beyond quibble or doubt that the opportunity is there but subject to the conditions herein noted. That the United States already has a good start and is making encouraging progress is shown by the fact that its exchange of trade with Latin America has grown in the last seven years, or during the present administration of the Pan American Union, nearly 100 per cent. or from $450,000,000 to $850,000,000.

"The European war, while greatly lessening the sources of Latin American imports and the market for exports, and opening a corresponding greater opportunity to United States exports and imports, has so unavoidably crippled Latin American financial resources and commercial machinery that it must require several months or a year before conditions can readjust themselves and permit results that many United States business men expect immediately.

"Despite the efforts, not only of the Latin-American embassies, legations and consulates, but of the Pan American Union, as an international organization, and the United States Departments of State and Commerce to state the situation exactly as it exists, countless articles have been appearing in various newspapers and magazines emphasizing an alleged 'golden opportunity' without pointing out its actual and present environments of money tightness and dislocation of international commercial methods. Numerous business men and commercial agents, in consequence, are crowding the steamers bound for Latin America with the expectation that they will find the Latin Americans awaiting them with outstretched hands filled with gold and ready to buy everything and anything they have to sell. These men will presently return to the United States and unfairly condemn and criticise the markets and peoples of the countries visited.

"A great stream of letters and telegrams from both North and South America are daily pouring into the office of the Pan American Union, as the international American bureau of information, and they prove the widespread interest in the field and opportunity, but they are invariably answered not only with the statement of the actual opportunity but with an admonition that the Latin American market, while vastly potential, is at this moment embarrassed by a serious financial stringency and dislocation of commercial conditions for which it is not in itself to blame.

"The opportunity of the hour, therefore, in a word, is not so much one for immediate large sales of United States manufactured products as one for coöperation and mutual help, together with careful investigation of commercial conditions and preparation to meet future competition successfully."

RAILWAYS

North Carolina—Plans are being prepared for the construction of a railroad from Kingston to Maple Hill, N. C., about 35 miles. J. T. Deal, Kingston, N. C., is interested.

South Carolina—Savannah Western Ry.—Surveys are being made by this company for the construction of a railroad from Estil to St. Paul, S. C., about 90 miles. C. H. Milligan, Charleston, S. C., is interested. Noted Sept. 3.

Tennessee—Alabama Great Southern Ry. — According to press reports this company plans to spend about $85,000 for the construction of a belt line in Chattanooga, Tenn. C. Dougherty, Cincinnati, Ohio, is Ch. Engr.

✚Wisconsin—Chicago & Lake Superior Ry.—This company has awarded a contract to MADDEN & CONNELL, for grading its proposed extension from Cambridge, Wis. to Rockdale, Wis.

✚Minnesota—Minnesota Central R.R.—This company has awarded the contract for the construction of its line from St. Cloud to Kimball and Fairhaven, Minn., to F. J. GLOVER & SONS, Minneapolis, Minn.

Kansas—Newton, Kansas & Nebraska R.R. — Preliminary arrangements are being made by this company for the construction of a railroad through Harvey, McPherson, Marion and Dickinson Counties. S. V. Wardall, Newton, Kan., is Ch. Engr.

✚South Dakota—South Dakota Central Ry.—A contract has been awarded by this company for constructing a 16-mile extension to its line north from Watertown, S. D., to P. E. SHUGART, Nevada, Iowa.

Oklahoma—Rosston, Grand Rapids & Protection R.R.—Surveys have been started by this company for the construction of its proposed 12-mile railroad to connect a point on the Wichita Falls & Northwestern Ry., near Rosston, Okla., with Doby Springs, Okla. L. A. Walton is Pres. and Gen. Mgr. Noted Sept. 10.

✚Washington—Bellingham & Northern Ry. — A contract has been awarded by this company for the construction of a three-mile extension to its line from Bellingham to Lake Whatcom, to HENRY McFEE, Seattle, Wash.

Arizona—J. A. Veness, Winlock, Wash., and associates are considering plans for the construction of a railroad from Wilcox to the mining district, about 20 miles.

California—Plans are being prepared for the construction of a railroad from Crescent City, Calif., to Yreka, Calif., with several branch lines. H. S. Wooley is interested.

ELECTRIC RAILWAYS

Pittsfield, Mass.—The Berkshire St. Ry. Co. has applied to the City Council for a franchise to reconstruct its line from White Terrace to St. Joseph's Church, in Pittsfield. C. Q. Richmond, Pittsfield, is Mgr.

Winchendon Springs, Mass.—The Northern Massachusetts St. Ry. Co. contemplates the extension of its line to Winchendon, Springs. J. A. Taggart, Greenfield, Mass., is Gen. Supt.

Albany, N. Y.—The City Council has granted a franchise to the United Traction Co. to construct and operate an electric railway from North Pearl St., on Sheridan Ave., to Chapel St. James F. Hamilton, Albany, is Gen. Mgr.

Bayport, N. Y.—The Suffolk Traction Co. has been granted franchises and is making preliminary arrangements for the extension of its lines from Bayport to Sayville and West Sayville. J. C. Brackenridge, 95 Liberty St., New York, N. Y., is Gen. Mgr. and Ch. Engr. Noted Sept. 3.

North Tonawanda, N. Y.—The International Ry. Co. has been granted franchises to construct an electric railway in North Tonawanda and Tonawanda. J. A. McKenna, Buffalo, is Secy.

Orange, N. J.—The Public Service Ry. Co. has been granted permission to extend its lines on Central Ave. R. E. Danforth, Newark, is Gen. Mgr.

Farrell, Penn.—The Valley Street Ry. Co. has been granted a franchise to construct and operate an electric railway in Farrell. R. P. Stevens, Youngstown, Ohio, is Vice-Pres.

Watsontown, Penn.—Arrangements are being made by the Lewisburg, Milton & Watsontown Passenger Ry. Co. for the extension of its line in Watsontown to the borough line. W. W. Wilson, Milton, is Gen. Mgr. and Pur. Agt.

Washington, D. C.—The Washington Ry. & Electric Co. has been ordered by the Public Utilities Commission to extend its Anacostia line from Nichols Ave. and Fourth St. for a distance of a mile. R. W. Crowell, Washington, is Pur. Agt.

Florence, Ala.—The Florence & Huntsville Interurban Ry. Co. has been incorporated to construct an electric interurban railway from Florence to Huntsville, with a branch line from Killen to Lexington, Tenn. Thurston H. Allen, Pres.; T. W. Pratt, Vice-Pres., and N. F. Thompson, Secy.-Treas.

West Point, Miss.—The citizens of West Point have consented to raise a bonus for the extension of the line of the Mississippi Electric Ry. Co. to West Point. F. W. Crisby, Columbus, Miss., is interested.

Gallatin, Tenn.—The Nashville-Springfield-Gallatin Ry. Co. is being organized by H. H. Mayberry and associates for the purpose of constructing an electric railway from Gallatin to Springfield, Tenn.

Middletown, Ohio—The Middletown, Reading & Cincinnati Interurban Ry. Co. is making surveys for the construction of the proposed electric railway which will connect Cincinnati and Middletown, about 30 miles. A branch line to Germantown and Dayton is under consideration. Michael Klaiber, Jr., Reading, Ohio, is interested. Noted Sept. 24.

Indianapolis, Ind.—Plans are being prepared by the Terre Haute, Indianapolis & Eastern Ry. Co. for the construction of an electric railway on South Eighth St., in Indianapolis. T. F. Grover, Terre Haute, is Gen .Mgr.

Murphysboro, Ill.—(Official)—Plans have been prepared by Edward Flad & Co., Engrs., De Menil Bldg., St. Louis, Mo., for the construction of an electric railway by the Murphysboro & Southern Illinois Ry. Co., from Murphysboro to Carbondale, about eight miles. Noted Sept. 17.

Corpus Christi, Tex.—The Ward Island Development Co. has applied to the Commissioner's Court of Nueces County for a franchise for the construction of an interurban electric railway from Corpus Christi to Ward Island. The company will establish a pleasure resort on Ward Island. The proposed line will be six miles long.

Glen Rose, Tex.—The Glen Rose & Walnut Springs Ry. Co. is making preliminary arrangements to start work on the construction of its proposed electric railway to connect Glen Rose and Walnut Springs, about 11 miles.

Clovis, Calif.—The Fresno Interurban Ry. Co. has received a franchise from the Council to construct and operate an electric railway in Clovis. This is part of a proposed electric interurban line which will connect Fresno and Clovis. J. B. Rogers is Mgr. Noted June 18 and Sept. 3.

Los Angeles, Calif.—The City Council has granted the Pacific Electric Ry. Co. a franchise to construct and operate three spur tracks in Los Angeles. J. McMillan, Los Angeles, is Gen. Mgr.

The Los Angeles Ry. Co. has assured a committee appointed by the Malabar Improvement Association that it will construct an electric railway on North Evergreen St., from East First to Wabash St. C. A. Henderson, Los Angeles, is Gen. Mgr. and Pur. Agt. Noted Sept. 24.

San Francisco, Calif.—M. M. O'Shaughnessy, City Engr., has prepared plans and is making surveys for the construction of the municipal electric railway through Golden Gate Park.

†Fort Williams, Ont.—The City Council has awarded a contract to JOHN MILLEN & SONS, Toronto, for furnishing equipment for the municipal electric railway construction in Fort William.

Peterboro, Ont.—The Peterboro Radial Ry. Co. is considering plans for the reconstruction of its electric railway on Charlotte St. W. H. Munro, Peterboro, is Local Mgr.

Lacombe, Alta.—Surveys have been made and preliminary arrangements are being made by the Lacombe & Blindman Valley Electric Ry. Co. for the construction of an electric railway to connect Lacombe, Bentley and Rimbey. J. C. Gibson, 56 King St., West Toronto, is Pres.

Vancouver, B. C.—According to press reports, the British Columbia Electric Ry. Co. is making preliminary arrangements for the construction of a line on South Cambie St. to connect its line with that of the Canadian Pacific Ry. Co. George Kidd, Vancouver, is Gen. Mgr.

LIGHT, HEAT AND POWER

Manchester, Conn.—The Bon Ami Co., manufacturer of cleansing compounds, has bought a site near its present plant, to be used for extensions, of which one of the first will be a power plant of sufficient capacity to supply the plant for some years to come.

New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received until Oct. 5, by C. B. J. Snyder, Supt. of School Buildings, Park Ave. and 59th St., for the installation of electrical equipment in Public School No. 52.

(Borough of Bronx)—(Official)—Bids will be received until Oct. 5, by the Superintendent of School Buildings, for electrical equipment in the additions to Public Schools Nos. 20 and 21.

(Borough of Richmond)—(Official)—Bids will be received until Oct. 5, by the Superintendent of School Buildings, for electrical equipment in Public School No. 20.

Niagara Falls, N. Y.—The Buffalo & Niagara Falls Electric Light & Power Co. will soon begin work on the construction of a transformer house and distributing station; the building will be 60x80 ft., of reinforced concrete and brick. The company also plans to build a storage house and garage. The total cost of the improvements will be about $60,000.

Kittanning, Penn.—The City Council has engaged George C. and Arthur M. Morgan, Hydraulic Engrs., 111 West Monroe St., Chicago, Ill., to prepare plans for a municipal electric-light plant and water-works system, to cost about $125,000.

Lewistown, Penn.—Roth & Co., Denkla Bldg., Philadelphia, are preparing plans for the municipal electric-light plant for the Borough of Lewistown. The building will be of brick and stone, one story. Noted Sept. 17.

Mauch Chunk, Penn.—It is reported that the Mauch Chunk Heat, Power & Electric Light Co. has purchased a site upon which to build a new substation. Steel towers will be erected from the substation of the Lehigh Navigation Electric Co. from which the Mauch Chunk company secures its power.

†Towson, Md.—The contract for the construction of the building for the power plant of the State Normal School has been awarded to SWEETSER LINTHICUM, JR. Noted Sept. 17.

Asheville, N. C.—Preparations are being made in the western part of North Carolina for the construction of a great hydro-electric plant on the Tennessee-North Carolina line. Two dams will be built in the Hiawassee River, one at Taylors Ferry, and the other at Chambers Creek. The main dam will be 180 ft. high. It is planned to furnish power throughout the south, including Birmingham, Nashville, Montgomery, Mobile and Pensacola. When completed, the development will cost from $5,000,000 to $10,000,000. Pryor Nelson, Murphy, N. C., is Pres. of the company.

Jacksonville, Fla.—It is reported that the city will install a 5000-kw. engine, costing about $60,000, in the municipal electric-light plant. W. H. Tucker is Supt.

Pablo Beach, Fla.—At an election held on Sept. 15, the citizens voted in favor of a bond issue of $10,000 for the installation of a municipal electric-light plant. As soon as the bonds are sold, bids for the construction of the plant will be asked. The J. B. McCrary Co., Atlanta Ga., is preparing plans for the plant.

Florence, Ala.—The Allentown Power Co., recently incorporated with $200,000 capital stock, will develop power on Cypress Creek by constructing two hydro-electric plants, building dams, etc.

Gibsland, La.—A franchise has been granted to H. M. Smith for the installation and operation of an electric-light and power plant. It is reported that the plant will be in operation by Nov. 1.

Melville, La.—It is reported that bids will be received until Oct. 6, by the Mayor, for the construction of an electric-light plant. Noted Sept. 24.

Princeton, Ky.—The question of a bond issue of $15,000, to be used for the installation of a municipal electric-light plant, will be submitted to the voters at the November election.

Sullivan, Ill.—Plans are under way for the establishment of a municipal electric-light plant. Hiram Phillips, Third National Bank Bldg., St. Louis, Mo., is Consult. Engr.

Lincoln, Neb.—Bids will be received until Oct. 15 by the City Council for improvements to the electric-light plant and waterworks system. Theodore H. Berg is City Clk.

†Parker, S. D.—The City Council has awarded the contract for the construction of the municipal electric-light plant to the E. M. FISHER CO., Fort Dodge, Iowa, at $19,998. Noted Aug. 13 and Aug. 27.

Malta, Mont.—It is reported that Shade & Levesconte, Malta, have applied to the City Council for a franchise to install an electric-light plant in the city.

†Edgerton, Mo.—The McComas Hydro-Electric Power Co., Edgerton, has awarded contracts (without bids) to the GENERAL ELECTRIC CO., Schenectady, N. Y., for machinery, JAMES LEFFEL CO., Springfield, Ohio, for turbines, and the J. B. EHRSOM & SONS MFG. CO., Enterprise, Kan., for the transmission system for its new plant, which will furnish electricity to 11 towns in the vicinity. The dam for the power is being built in the Platte River one mile west of Edgerton. J. M. McComas, Edgerton, is chief promoter of the company. C. O. Beardslee, Lincoln, Neb., is Engr.-in-Charge.

Kirkwood, Me.—The Board of Aldermen has authorized improvements to the municipal electric-light plant, to cost about $17,000. The Board of Public Improvements will have charge of the work.

Corpus Christi, Tex.—The Corpus Christi Gas Co. is building a gas manufacturing plant, and will install a new distributing system. The total cost will be about $75,000.

Marble Falls, Tex.—The proposed bond issue for the construction of a municipal electric-light plant and water works was defeated at the recent election. Noted July 16.

Oceanside, Calif.—The Southern Sierras Power Co., San Bernardino, Calif., will build a transmission line from Elsinore to Oceanside, and will install distributing systems at Oceanside and intermediate towns.

Quebec, Que.—The City Council has decided to build a boiler room on Beauport Road, estimated to cost $150,000. The building will be of brick and steel. J. L. Pinsonnault, City Hall, is the Arch.

Simcoe, Ont.—The Town Council has decided to equip a hydro-electric plant, including a substation and the construction of eight miles of transmission lines. The cost is estimated at $40,000. W. C. McCall is Town Clk.

BRIDGES

★Portland, Maine—(Official)—Bids will be received until noon, Nov. 2, by the Commissioners of Cumberland County for the construction of a bridge between the cities of Portland and South Portland. J. R. Worcester & Co., 79 Milk St., Boston, Mass., is Engr. in Charge. For details see advertisement under "Contracts To Be Let." Noted Sept. 24.

Bellingham, Mass.—Bids will be received until Oct. 3 by the Board of Selectmen for the construction of a reinforced-concrete bridge over the Charles River at Caryville. Harold M. Bullard is Chn. of the Bd. Whitman & Howard, 220 Devonshire St., Boston, are Engrs. in Charge.

Dedham, Mass.—Bids will be received until Oct. 6 by the Commissioners of Norfolk County for the construction of a concrete beam bridge between Norwood and Canton. John F. Merrill is Chn. of Comrs. E. Worthington is Engr.

Central Falls, R. I.—(Official)—Plans may be submitted until Oct. 10 for the construction of a plate girder bridge masked with reinforced concrete, or a reinforced-concrete bridge faced with granite, over the Blackstone River between the city of Central Falls and the town of Cumberland, R. I. Howard F. Esten, of Esten & Black, 18 East Ave., Pawtucket, R. I., is Consult. Engr. Noted June 18 and June 25.

Elmira, N. Y.—The Board of Public Works has approved the plans of the City Engineer for a new bridge over Heller Creek at Hoffman St. T. A. Brown is City Engr.

New York, N. Y.—(Borough of Bronx)—(Official)—Bids will be received until 10:30 a.m., Oct. 8, by Douglas Mathewson, Pres. Borough of the Bronx, for repairing, cleaning and painting the bridge over the tracks of the New York, New Haven & Hartford R.R. at East 153d St. The Engineer's estimates are as follows: 40,000 lb. of steel and iron in truss members, 50,000 lb. steel in floor built members, 75,000 lb. steel in rolled members in floor, 85,000 lb. steel in buckle plates, 9000 lb. iron castings, 500 sq.yd. pavement removed, cleaning and painting.

†Syracuse, N. Y.—The Board of Contract and Supply has awarded the contract for the construction of two bridges across Onondaga Creek, one at Oxford St. and the other at West Newell St., to the HOOKWAY CONSTRUCTION CO., at $9810 and $8678 respectively.

Harrisburg, Penn.—The following bids were opened Sept. 23 by the Commissioners of Dauphin County for bridge construction: Bridge over Swatara Creek between Royalton and Middletown, (a) steel, (b) concrete: G. W. Ensign, Inc., (a) $19,958, (b) $21,103; the Ferro-Concrete Co., (a) $20,998, (b) $16,545; Pennsylvania Steel Co., (a) $19,990; Whitaker & Diehl, (a) $23,872; Central Construction & Supply Co., (b) $18,000: Bridge over Wiconsico Creek, Ferro-Concrete Co., $8847; G. W. Ensign, Inc., $6762; Whitaker & Diehl, $13,964. Noted Sept. 10.

†New Castle, Penn.—(Official)—The Commissioners of Lawrence County have awarded the contract for the construction of a 50-ft. concrete arch over Hettenbaugh Run, Hickory Township, to C. E. KIMBROUGH, St. Cloud Bldg., New Castle, at $3130. There were nine other bids ranging from $3598 to $5063. Noted Aug. 27.

†Philadelphia, Penn.—The Department of Public Works has awarded the following contracts for repairing and repainting bridges: AMERICAN PAVING & CONSTRUCTION CO., at $10,550 for the bridge at Broad St. and Lehigh Ave., and $3800 for the Falls of Schuylkill Bridge; C. P. GRIM, $5900 for the bridge over the Schuylkill River on the line of Girard St.; W. A. MUNDY, $7070 for the Market St. Bridge.

†Baltimore, Md.—The State Roads Commission has awarded the contract for the construction of the draw span in the Hanover St. Bridge to the STROBEL STEEL CONSTRUCTION CO., Chicago, at $86,430. List of bidders noted Sept. 24. The Commission also awarded the contract for the excavation and fill for the city end of the Hanover St. Bridge under the arcade to H. P. CONVERSE & CO., Boston, at $4140, and the contract for the excavation and fill for the bridge to the LUCK CONSTRUCTION CO., Roanoke, Va., at $54,900.

†Frederick, Md.—The State Roads Commission, Baltimore, has awarded the contract for the construction of a bridge across the Patapsco River, at Frederick, to the LUTEN BRIDGE CO., York, Penn., at $15,500.

Fayetteville, N. C.—(Official)—Bids will be received until noon, Oct. 12, by the Commissioners of Cumberland County for the construction of a number of concrete bridges in the county, to cost not less than $25,000 nor more than $30,000. Fulton R. Hall is Clk. of the Bd.

Dalton, Ga.—Bids will be received until Oct. 6, by H. J. Wood, Ordinary and Chn., Board of Roads and Revenue, for the construction of a bridge across Mill Creek, on the Dalton and Spring Place Road, about 3½ miles east of Dalton.

Danielsville, Ga.—Bids will be received until Oct. 21 by the Commissioners of Madison and Elbert Counties at Danielsville for the construction of a steel bridge over the Broad River at Moore's Shoals near Carlton. The bridge will be 484 ft. long, having two spans of 172 ft. each, two of 66 ft. each, and five piers containing about 530 cu.yd. rubble masonry. Searcy B. Slack, Athens, Ga., is Engr. J. W. Draper, Danielsville, is Supt. of Roads and Bridges.

Greenville, Miss.—Bids will be received until Oct. 5 by the Board of Supervisors of Washington County for the construction of three steel bridges in Bogue Pahlia Drainage District; two will be 180 ft. long each, and the other 75 ft. long. These will be the first of about 45 bridges to be built in this district. The Morgan Engineering Co., Memphis, Tenn., is Engr. in Charge.

Pittsboro, Miss.—Bids will be received until Oct. 6 by the Highway Commissioners of Supervisors' District No. 1 for building a number of bridges on the road from Pittsboro to the eastern boundary line of the district, and on the road from that line to the river crossing near Old Town. A. A. Bruner and W. R. Byars are Comrs.

★New Orleans, La.—(Official)—Bids will be received until 11 a.m., Oct. 26, by the City of New Orleans, for the construction of a Strauss trunnion bascule lift bridge over the New Basin Canal on the axis of City Park Ave. A. G. Ricks is Comr. of Public Finances. For further details, see advertisement under "Contracts to Be Let."

New Orleans, La.—Press reports state that the New Orleans Ry. & Light Co. has agreed to build a new bascule bridge at West End in place of the foot bridge now in use at the lake resort. The bridge will cost about $40,000. Hugh McCloskey is Pres. of the New Orleans Ry. & Light Co.

Plaquemine, La.—Bids will be received until Oct. 3 by the Police Jury of Iberville Parish for the construction of a steel drawbridge across Bayou Grosse Tete Bay. W. A. Holloway is Pres. of the Police Jury.

†Memphis, Tenn.—The City Council has awarded the contract for the construction of a concrete arch culvert to A. M. ALEXANDER, Memphis, at $8700.

Bellaire, Ohio—Bids will be received until Oct. 9 by the Board of Commissioners of Belmont County, St. Clairsville, for the construction of a reinforced concrete bridge over Indian Run in the city of Bellaire.

†Duncan Falls, Ohio—The Commissioners of Muskingum County, Zanesville, have awarded the contract for the construction of a 200-ft. reinforced-concrete viaduct at the west end approach of the Duncan Falls Bridge to D. L. ELKINGTON, Toledo, Ohio, at $9650. Noted Sept. 3.

Fremont, Ohio—(Official)—All bids received Sept. 12 by the Commissioners of Sandusky County for the construction of the Tindall Bridge over the Sandusky River, Ballville Township, have been rejected. Noted Aug. 27.

West Carrollton, Ohio—Bids will be received until 10 a.m., Oct. 15, by the Commissioners of Montgomery County, Dayton, for the construction of the superstructure of a bridge over the canal at Cedar St., West Carrollton. W. H. Aszling is Secy. of the County Comrs.

Columbus, Ind.—The Board of Commissioners of Bartholemew County has appropriated $12,000 for a new bridge to replace the Marr Bridge.

†Indianapolis, Ind.—(Official)—The Board of County Commissioners has awarded the contract for the construction of the bridge over the White River at West New York St., to the CENTRAL STATES BRIDGE CO., Indianapolis, Ind., at $125,-035. Noted Aug. 6, Aug. 13, and Aug. 27.

Richmond, Ind.—The County Council of Wayne County is considering the construction of a bridge over the Whitewater River at an estimated cost of $100,000.

Wabash, Ind.—(Official)—Bids will be received until 1:30 p.m., Oct. 7, by the Board of Commissioners of Wabash County for the construction of two bridges in Chester Township, and two in Waltz Township. Daniel Showalter is County Audr.

Ecorse, Mich.—At the fall election the citizens will vote on the question of a bond issue of $35,000 to be used for building a bridge over Ecorse Creek.

★Chicago, Ill.—(Official)—Bids will be received until noon, Oct. 8, by John McGillen, Clk. of the Sanitary District of Chicago, for the construction of the superstructure of a steel highway bridge over the Calumet-Sag Channel of the Sanitary District of Chicago, on the line of Bach Road, Palos Township, Cook County. For further information, see advertisement under "Contracts to Be Let."

†Libertyville, Ill.—(Official)—The following bids were received Sept. 5, for the construction of the Oak Spring Bridge, Libertyville Township: Cullen Friestadt, Chicago, $5445; Leo Delhaye, Waukegan, $8400; Engineering Construction Co., Chicago, $5805; Melloy Construction Co., Chicago, $7346; JOHN DARROW, Waukegan, $4790 (awarded contract); Continental Bridge Co., $4987, alternative steel plan, $4290, or for steel superstructure only, $3490. Noted Sept. 3 and Sept. 24.

Charles City, Iowa—The Board of Supervisors of Floyd County is considering a new bridge over the Cedar River to be located at Kelly St.

Leavenworth, Kan.—The Commissioners of Leavenworth County have instructed the County Clerk to advertise for bids for the construction of 19 bridges and culverts in the county to cost from $250 to $1050 each. The total cost is estimated at $15,451. Jesse Hall is County Clk.

†Wichita, Kan.—The Commissioners of Sedgwick County have awarded the contract for the construction of six concrete bridges in Lincoln Township to the MISSOURI VALLEY BRIDGE CO.

The County Commissioners have decided to build a new bridge over Dog Creek, Rockford Township.

Hastings, Neb.—The Boards of Supervisors of Adams, Buffalo and Kearney Counties have decided to build a new concrete bridge over the South Branch of the Platte River at the point where the three counties join, northwest of Kenesaw, Adams County. The three counties will share equally in the cost of the bridge, which will be located near the new town of Denman.

Medora, N. D.—(Official)—The following bids were received Sept. 7, by the Commissioners of Billings County for the construction of a bridge over the Little Missouri River near Medora, plans (a) and (b): M. A. Adams & Co., (a) $11,960, (b) $11,570; Midland Bridge Co., (a) $11,300, (b) $10,900; Continental Bridge Co., (a) $13,400, (b) $12,700; Great Northern Bridge Co., (a) $14,300, (b) $14,600; Security Bridge Co., (a) $10,987, (b) $12,950; Hennepin Bridge Co., (b) $12,950; Canton Bridge Co., (a) $10,200. All bids were rejected. Noted Aug. 13 and Sept. 24.

†Arrey, N. M.—The contract for the construction of a steel pony truss bridge over the Rio Grande River at Arrey has been awarded to the MIDLAND BRIDGE CO., Kansas City, Mo., at $10,475. Noted Aug. 6 under Santa Fé.

Beaumont, Tex.—The Commissioners of Jefferson County have instructed the County Engineer to prepare plans and advertise for bids as soon as possible for the construction of a drawbridge over Taylor's Bayou at the site of the old Gill Bridge.

Fredericksburg, Tex.—Bids will be received until Oct. 3 by the Commissioners of Gillespie County for the construction of a low-water bridge over the Pedernales River at Austin Crossing. Herman Usener is County Clk.

†Mason, Tex.—The Commissioners of Mason County have awarded the contract for a reinforced concrete bridge, about 330 ft. long and 16 ft. wide, to the ALAMO CONSTRUCTION CO., at $9000.

Ellensburg, Wash.—The Improvement Committee of the City Council will soon ask for bids for replacing the bridges on Ruby and Sprague Sts. at Sixth Ave., and a bridge in West Ellensburg.

†Los Angeles, Calif.—The Board of Public Works has awarded the contract for the construction of a reinforced-concrete bridge over the Arroyo Seco at Ave. Forty-three, to MUNOZ & MUNOZ, at $16,479. Noted Aug. 27 and Sept. 10.

Oakland, Calif.—P. A. Haviland, County Surv. of Alameda County, is preparing plans for the repair of three bridges spanning the estuary. The estimated cost of the work is $30,000.

San Francisco, Calif.—See item under "Miscellaneous." Foot Bridges over Embarcadero.

San Jose, Calif.—Bids will be received until 11 a.m., Oct. 5, by the Board of Supervisors of Santa Clara County, for the construction of a reinforced-concrete bridge over Los Gates Creek on the Infirmary Road. J. G. McMillan is County Surv.

San Luis Obispo, Calif.—The Board of Supervisors of San Luis Obispo County is preparing to build a 300-ft. bridge at Miles Station, and a steel bridge over the Salines River at San Miguel. F. J. Rodriguez, San Luis Obispo, is County Clk.

+Santa Ana, Calif.—The contract for the construction of the Anaheim Landing pile trestle, about 973 ft. long, has been awarded to the RUSSELL-GREENE-FOELL CO., Higgins Bldg., Los Angeles, at $7545.

Santa Barbara, Calif.—(Official)—The following bids were received on Sept. 17 by the City Trustees for the construction of a bridge and wing walls at De La Guerra St., (a) bridge, (b) walls, (c) totals: M. Johnson, Santa Barbara, (a) $9520, (b) $1102, (c) $10,622; Mercereau Bridge & Construction Co., Los Angeles, (a) $6660, (b) $684, (c) $7344; Boardman Construction Co., Los Angeles, (a) $6330, (b) $810, (c) $7140; W. E. Larimer, Stockton, (c) $6782. The Engineer's estimate of the work complete was $6880. George P. Robinson is City Engr. Noted July 30.

Bids will be asked within a few weeks for the construction of two other reinforced-concrete bridges with concrete retaining walls, to be located on East Blvd.

+Ottawa, Ont.—The Board of Control has awarded the contract for the construction of four concrete piers and two abutments for the substructure of the Billings Bridge to THOMAS BREWDER, Lyons St., Ottawa. The contract for the superstructure of the Billings Bridge has been awarded to the DOMINION BRIDGE CO., LTD., Montreal, Que., at $32,784 for the steel, and $9990 for its erection. Noted July 23.

WATER SUPPLY—IRRIGATION

Amsterdam, N. Y.—The contract has been readvertised and bids will be received until Oct. 6 by the Commissioner of Public Works for making 50 or more wash borings at Glen Wild. James P. Wilson is City Clk. Noted Sept. 10.

Brownville, N. Y.—The citizens voted $30,000 in bonds, the proceeds to be used for the installation of a water system. Noted Sept. 17.

Greece (Gates post office), **N. Y.**—The creation of a new water district is contemplated by the citizens, requiring about five miles of water mains. Clifford E. Clark is Comr.

+Liberty, N. Y.—The contract for constructing a 500,000-gal. reservoir has been awarded by the Board of Water Commissioners to GEORGE MESLER, Liberty, at $5000. Bids opened Sept. 10. Noted Sept. 3.

Newark, N. J.—Runyon & Carey, Engrs., have been retained by the Board of Chosen Freeholders to prepare plans and specifications for the installation of a complete water system at the Overbrook Hospital. Noted May 21.

Perth Amboy, N. J.—The Board of Water Commissioners has voted to install new 6-in. water pipe lines in Bertrand Ave., Cornell St., Homann Ave., Neville St., Donald Ave., Summit Ave. and Meinzer St. The work is estimated to cost $20,000.

Philadelphia, Penn.—Bids will be received by the Director of Public Works until Oct. 6 for repairing the Fairhill reservoir; pumps for Torresdale, Wents Farm and Belmont pumping stations; feed water regulators for Shawmont and Queen Lane; flanged heads for Torresdale pumping station; structural steel for Belmont pumping station and steel doors for Roxborough filters.

★Pittsburgh, Penn.—(Official)—Bids will be received by the City Controller, until 10 a.m., Oct. 15, for laying two 16-in. steel pipe lines across the Bloomfield Bridge and for laying 20-in. and 16-in. c.-i. pipe lines from Herron Hill Reservoir to Garfield Tanks. Robert Swan is Dir. of Pub. Wks.

Reading, Penn.—An election will be held in November to vote on the proposition of issuing $450,000, the proceeds of which to be used for the construction of a new reservoir.

+Baltimore, Md.—The contract for closing 15-ft. relief opening of the New Loch Raven dam has been awarded, according to press reports, to KING BROS., at $11,928.

Scottsville, Va.—Bids will be received by E. L. Fox, Chn. of the Water and Light Comn., until 2 p.m., Oct. 5, for installing a water system and electric-light plant. R. T. Sunday, 2 North 11th St., Richmond, is Engr.

Barboursville, W. Va.—About 5000 ft. of additional water mains will be laid by the city to connect with the municipal plant.

Huntington, W. Va.—Bonds for $500,000 were voted at recent election, the proceeds of which will be used for construction of a water system. Floyd S. Chapman is Mayor. Noted Sept. 10.

Louisville, Ga.—Bids will be received by J. H. Polhall, City Clk., until noon, Oct. 6, for making extensions to the water system. W. Hopson Goodloe, Macon, Ga., is Consult. Engr. Noted Sept. 10.

Jacksonville, Fla.—Bids will be received by the Board of Bond Trustees until 8 p.m., Oct. 5, for furnishing and delivering f.o.b. Jacksonville, the following: 1750 lead connections; 1600 corporation cocks; 2350 curb cocks; 58 valves from 6-in. to 16-in.; 24 assorted sizes of Smith bolted tapping sleeves and valves; 25 fire hydrants; 3000 c.-i. frames and covers for meter boxes and 200 roadway boxes. Noted Sept. 3.

Plant City, Fla.—Bonds for $20,000 were voted by the citizens, the proceeds of which will be used for the improvement of the water system.

Georgiana, Ala.—The citizens, at a recent election, voted to install a water system.

New Orleans, La.—(Official)—Bids will be received by the Sewage and Water Board until Nov. 4 for making extensions to the water system. Specifications are on file at the office of "Engineering News." Noted Sept. 17.

Plaquemine, La.—(Official)—Bids will soon be received for the sale of $42,000 in bonds, the proceeds of which will be used for the installation of a water system. C. A. Rees is City Engr. Noted Aug. 27.

Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, room 513, City Hall, until noon, Oct. 7, for valves, pipe and special steel castings, for the Water Department. Specifications are on file with Charles F. Schultz, Comr. ofWater.

Middletown, Ohio—Bids will be received until Oct. 15, by the City Commissioners for repairing the Holly quadruplex water power driven pump and for installing a water power operated pump having a capacity of 1050 gal. per minute. Pollard & Ellms, Union Central Bldg., Cincinnati, are the Engrs.

Russell, Ohio—Bonds were voted by the citizens at a recent election, the proceeds to be used for the construction of a municipal water system.

+Sandusky, Ohio—Press reports state the contract for the construction of the new water-works intake pipe and crib has been awarded to SHIRLEY-SHELDON CO., Toledo, at $40,813. Noted Sept. 9.

Steubenville, Ohio—The ordinance authorizing a bond issue of $60,000 for the completion of the filtration plant and for covering the reservoirs has been repealed and a new bond issue of $65,000 passed. Charles R. Wells is City Engr. Noted Aug. 27.

Gary, Ind.—Bids will be received until Oct. 13 by H. C. Francis, City Clk. for the sale of $76,000 in bonds the proceeds of which will be used for the construction of a water system. Noted Sept. 3.

Chicago, Ill.—(Official)—Bids will be received until 11 a.m., Oct. 5, by the Harbor and Subway Commission for furnishing and installing water supply, sewage plumbing, gas and drainage systems on Pier No. 2 in Harbor District No. 1. E. C. Shankland is Chn. Harbor and Subway Comn.

Joliet, Ill.—The Common Council contemplates constructing another reservoir with a capacity of 4,000,000 gal. C. D. O'Callaghan is City Engr.

Red Bud, Ill.—Bids will be received by the City Clerk until Oct. 9 for installing a water system. E. A. Thompson, East St. Louis, is Engr. Noted Sept. 24.

+Appleton, Wis.—Press reports state that the contract has been awarded to ALLIS-CHALMERS MFG. CO. for furnishing a motor-driven centrifugal pump for the municipal water-works. Noted Sept. 3.

Bloomington, Wis.—At a recent election the citizens voted to issue bonds for the installation of a water system. Noted June 25.

Wauwatosa, Wis.—(Official)—Bids will be received by the Board of Public Works, until 10 a.m., Oct. 3, for laying water mains and sewers in portions of various streets. F. A. Torkelson is City Engr. Noted June 25.

Ankeny, Iowa—Bids will be received until 8 a.m., Oct. 12, for the construction of a municipal water system. The estimated cost is $12,000.

Chariton, Iowa—The construction of a reservoir and the extension of the water mains are under consideration.

+Columbia Heights, Minn.—(Official)—The contract for extending the water system has been awarded to W. D. LOVELL, 1415 Eighth St. S. E., Minneapolis, at $5325. Bids were opened Sept. 19. Noted Sept. 10.

Ely, Minn.—Bids will be received by I. Wisted Jr., City Clk., until 8 p.m., Oct. 5, for furnishing one cross compound Meyer gear crank and fly-wheel pumping engine, with a capacity of 1,500,000 gal.; one 100-kw. alternating current engine type generator; one steam engine and 300,000-gal. steel tank on steel tower. W. C. Buck, Minneapolis, is Consult. Engr.

Hibbing, Minn.—Bids are being received for the construction of a 1,000,000-gal. concrete reservoir. The estimated cost is $14,000.

+Wellington, Kan.—(Official)—The contract for furnishing and laying 20,000 ft. of 16-in. Matheson Joint steel pipe and 40,000 ft. of 18-in. pipe has been awarded to N. S. SHERMAN MACHINE & IRON WORKS, Oklahoma City, Oklahoma, at $120,000. The contract for a 500,000-gal. tank was awarded to CHICAGO BRIDGE & IRON WORKS, at $17,690. The Benham Engineering Co. is the Consult. Engr. Noted Aug. 27.

Alliance, Neb.—Plans have been prepared for the construction of a new storage reservoir for the city. The reservoir will be built of reinforced concrete, 36x104 ft. and will have a capacity of 500,000 gal. The estimated cost is $15,000.

+Aberdeen, S. D.—The contract for constructing a water system has been awarded by the city to STANLEY EDMUNDS, Yankton, at $5053.

Summit, S. D.—The city will construct a municipal water system at an estimated cost of $8000.

+New Rockford, N. D.—The contract for constructing a water system has been awarded to JAMES KENNEDY, Fargo, at $79,377.

Chinook, Mont.—At an election held recently the citizens voted to issue $10,000 in bonds the proceeds of which to be used for the improvement of the water works. Gerhard-Jaqueth Co., Great Falls, is the Engr. Noted Aug. 6.

+Hardin, Mont.—The contract for constructing a water system for the city has been awarded to SECURITY BRIDGE CO., Billings, Mont., at $24,333.

+Melstone, Mont.—The contract for installing a municipal water system has been awarded to NOWELL-ATHERLY CO., Billings, Mont. Noted Sept. 17.

Arkadelphia, Ark.—The Arkansas Power Co. has been granted a new franchise and will install pumps and a filtration plant.

Electra, Tex.—The City Commission contemplates developing a water supply six miles from Electra and to construct a water works at Electra.

El Paso, Tex.—Bids for installing a new pump and boilers at the municipal water works plant were received by the City Council as follows: Fulton Iron Works, St. Louis, Mo., $43,300, $44,700 and $54,700; Fred M. Prescott Steam Engine Co., El Paso, $61,700, $62,500 and $63,00; Derbyshire-Harvey Iron & Machinery Co., El Paso, $110,834; Da la Vergne Engine Co., $88,400. The different prices submitted by each bidder was for different character of work. Noted Sept. 24.

Nampa, Idaho—An election will be held Oct. 10, to vote on the proposition of bonding the Nampa Meridian Irrigation District to the extent of $3,304,500 for improvements. F. C. Horn, Boise, is Consult. Engr.

St. Maries, Idaho—At a recent meeting, the City Council voted to retain a hydraulic engineer, to investigate the present water supply in Cedar, Thorn and Cañon Creeks, and make a report on it, with estimate of cost of installing a water system to supply St. Maries.

Seattle, Wash.—The City Council has authorized the laying of water mains in 38th, 39th, 40th, 41st and 42d Aves., S. W. from West Alaska to West Charleston St., West Oregon, West Gennessee, West Dakota and Belvidere Ave. A. H. Dimock is City Engr.

†Seattle, Wash.—The contract for laying water mains in 47th Ave. N. W. has been awarded to L. COLUCCIO, Seattle, at $8248. Noted Sept. 24.

Garden Grove, Calif.—The Garden Grove Water Co. will build a storage tank and a new distributing system and install a pumping plant. J. A. Knapp is Pres. of Bd. of Dir.

Glendora, Calif.—Bonds to the amount of $57,500 have been voted for the construction of a water system.

Orange, Calif.—The El Modena Domestic Water Co. has been organized with $10,000 capital by John King, H. M. Gray and George Wood and others. The company will distribute water at El Modena.

Red Bluff, Calif.—The citizens contemplate installing a municipal water system at a cost of $85,000.

Montcalmville, Que.—The Council contemplates constructing water mains, and sewers, W. D. Baillarge, 50 St. Louis St., is Engr.

Saanichton, B. C.—The citizens contemplate spending $375,000 for the construction of a water system.

Vancouver, B. C.—Plans are being prepared by the municipal engineer for a water system for West Vancouver. A pipe line will be built up Sister Creek about three miles from the water front which will require 20 miles of steel pipe. A dam will also be constructed with a capacity of 2,000,000 gal.

SEWERS

Boston, Mass.—Bids will be received until Oct. 2, by the Public Works Department for constructing sewers in St. Andrews Road, East Boston, Cummings Road and Commonwealth Ave., Brighton District. L. K. Rourke is Comr.

†The contract for constructing sewers and drains in Blue Hill Ave. and Deering Road, Dorchester District, has been awarded to WILLIAM L. DOLAN, at $6066. Other bidders were: L. Balboni, $6161; F. Drinkwater, $6170; Antony Gefalo, $6189; John Guarino, $6209; M. De Sisto, $6229; West Roxbury Trap Rock Co., $6890; A. Baruffaldi, $6905; M. H. Kelley, $6949; James J. Conway, $7088; James F. Murphy, $7294; J. H. Ferguson, $7471; William Barrett, $7533; George J. Regan, $8470. L. K. Rourke is Comn. of Pub. Wks. Noted Sept. 24.

Chicopee, Mass.—The Board of Aldermen has passed an order appropriating $14,000 for sewers in the Fairview District.

†Binghamton, N. Y.—The contract for constructing a sewer in the Sixth ward has beeen awarded by the Board of Contract and Supply to B. L. GABRIEL, at $14,165. Noted Sept. 24.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Pres., Borough of Brooklyn, until 11 a.m., Oct. 7, for constructing sanitary sewers in West 27th St. from Surf Ave. to Neptune Ave.

★Patchogue, N. Y.—The low bidder for constructing a storm water sewer was George Marshall & Son, Jamaica, at $5764. Edward B. Woodruff is Village Clk. Noted Aug. 20.

Syracuse, N. Y.—The Common Council contemplates constructing a sewer in Warner Ave., from Cannon St. to Hope Ave. The estimated cost is $6000.

Syracuse, N. Y.—Bids will be received until 4 p.m., Oct. 7, by the Intercepting Sewer Board for completing the Onondaga Creek sewer.

East Orange, N. J.—Bids were received, Sept. 14, for constructing a sewer drain in Fourth Ave. and North 19th St. George Olcott & Son, East Orange, was low bidder at $4426. Noted Sept. 3.

Orange, N. J.—(Official)—Bids will be received by John J. Byrne, City Clk., until 4 p.m., Oct. 6, for constructing sewers in various streets.

Woodbridge, N. J.—(Official)—Bids will be received until 8:30 p.m., Oct. 7, at the Town Hall, for constructing vitrified pipe sewers in First, Third and Tappan St. at Port Reading.

†Altoona, Penn.—The contract for constructing a sanitary sewer system in the 11th Ward has been awarded to LOOMIS & KING, Altoona, at $16,343. Noted June 18.

†Archbald, Penn.—The contract for constructing a sewer in Hill St. has been awarded to BOLAND BROS., at $10,450. Noted Sept. 17.

Hazleton, Penn.—An election will soon be held to vote on the proposition of issuing bonds for $200,000 for the construction of sewers. Barton Youngman is City Engr.

Muncy, Penn.—Plans will be filed with the State Board of Health by the Borough Council for a sewage-disposal plant.

Norristown, Penn.—An election will be held in November to vote on the proposition of issuing $100,000 in bonds, the proceeds of which are to be used for the construction of a sewage-disposal system.

Parkesburg, Penn.—Plans are being prepared by F. H. Shaw, Engr., Brenaman Bldg., Lancaster, for the construction of a sewer system and sewage disposal plant. Noted Sept. 3.

Philadelphia, Penn.—A sewer will be constructed in Indiana Ave., from Fourth to 12th St., at an estimated cost of $200,000.

Reading, Penn.—The City Council has authorized a bond issue of $50,000 for the construction of a sewage filter. Edmund Ulrich is City Engr. Noted Sept. 17.

Wilmington, Del.—The city contemplates extending the Rising Sun sewer. The sum of $10,000 will be contributed by private parties.

Rockville, Md.—Bids will be received until Oct. 7 by John J. Higgins, Clk., to Council and Mayor, for constructing a sewer system and sewage disposal plant. Ezra B. Whitman, Fidelity Bldg., Baltimore, is Consult. Engr.

Augusta, Ga.—Bids will be received about Oct. 2 for constructing sewers from Wrightsboro Road extension to empty into Mollie's Branch near Buckeye Oil Mill. The estimated cost is $12,000. Nisbet Wingfield is Comr. Pub. Wks.

Lafayette, Ga.—Bonds for $17,000 have been voted by the citizens, the proceeds of which will be used for the laying of sewers. Noted Sept. 24.

Louisville, Ga.—Bids will be received by J. H. Polhall, City Clk., until noon, Oct. 6, for laying sanitary sewers. W. Hopson Goodlie, Macon, is Consult. Engr. Noted Sept. 10.

†Daytona, Fla.—(Official)—The contract for installing a Riensch-Wurl screen in the sewage-treatment plant has been awarded by the Board of Public Works to SANITATION CORPORATION, 50 Church St., New York, N. Y. George W. Fuller, New York, N. Y., is Consult. Engr. Noted June 18.

Pablo Beach, Fla.—Bonds for $35,000 have been voted by the citizens, the proceeds of which will be used for the construction of sewers. Charles H. Mann is Bond Trustee. Noted Sept. 10.

New Orleans, La.—(Official)—Bids will be received by the Sewage and Water Board, City Hall, until Nov. 4, for extending the sewer system. Specifications are on file at the office of "Engineering News." Noted Sept. 10.

†Nashville, Tenn.—The contract for constructing a sewer in 28th Ave. has been awarded to THOMAS MILLER & CO., at $10,770.

Cincinnati, Ohio—(Official)—Bids will be received by Philip Fosdick Dir. Pub. Ser. until noon, Oct. 8, for constructing a sewer in Montana Ave.

Cincinnati, Ohio—(Official)—Bids will be received by Philip Fosdick, Dir. of Pub. Ser., until noon, Oct. 8, for constructing a sewer in the ravine east of Concordia St., from Melish to Lincoln Ave.

†The contract for constructing part of Duck Creek intercepting sewer from Evanston to Dana Ave. has been awarded by the Director of Public Service to D. P. FOLEY, Cincinnati, at $25,335. Bids opened Sept. 18. Noted Sept. 17.

New Philadelphia, Ohio—Bids will be received by J. E. Scott, Dir. of Pub. Serv., until Oct. 5, for installing a sanitary sewage lift on West High St.

†Wooster, Ohio—The contract for constructing sewers in several streets has been awarded to BARRET & VITARO, Wooster, at $4926.

†Youngstown, Ohio—The contract for laying the Mahoning Ave. sewer has been awarded to ANDREW TRUPPO, at $33,000; the Steelton District sewer to CHARLES HARRIS, at $47,000, and another section of the Steelton sewer to A. O'HARA, at $14,500, and district sewer No. 3 to EDWARD CONRICOTTE, at $11,000.

Geneva, Ill.—The Embankment Co., Geneva, Ill., will sublet contracts for constructing about five miles of 6- to 10-in. tile sewers. Bids are now being received.

†Beloit, Wis.—The contract for constructing sewers has been awarded to CLAYTON E. TOLE CO., Rockford, Ill., at $5036. Other bids were: G. W. Mulholland, Kaukauna, $5121; Johnson & Thompson, Racine, $5126; Sweeny Bros., Reedsburg, $6034; Thill-Manning-Whalen Co., La Crosse, $6377; George Welch, Beloit, $5645. Noted Sept. 10.

Oshkosh, Wis.—Bids will be received by the Board of Public Works until 2 p.m., Oct. 2, for constructing a sewer in Lincoln St.

Wauwatosa, Wis.—(Official)—See item under "Water Supply and Irrigation."

Clinton, Iowa—Bids will be received by F. W. Leedham, City Clk., until 8 p.m., Oct. 13, for constructing a sewer in Fourth St. The work involves 830 cu.yd. of rock excavation, and 1600 ft. 18- and 10-in. vitrified pipe.

Grinnell, Iowa—(Official)—Bids will be received by the City Council, until 7:30 p.m., Oct. 12, for constructing 12¾ miles of 8- to 22-in. sewers with sedimentation tank and sand filters. A. C. Harriman is City Clk. Iowa Engineering Co., Clinton, is Engr. in Charge.

Waukon, Iowa—An election will be held Oct. 12 to vote on the proposition to issue $25,000 in bonds for a sewer system.

New Ulm, Minn.—Bids will be received by William Backer, City Clk., until 5 p.m., Oct. 8, for constructing a sanitary and storm sewer on First St.

Proctor, Minn.—Bids will be received by R. G. Wombacher until noon, Oct. 12, for constructing sewers and a sewage disposal plant.

Fort Scott, Kan.—Bids will soon be received by Miss C. Lueffel, City Clk., for a sewage-disposal system. The approximate cost is $25,000.

Hutchinson, Kan.—Plans are being prepared for the construction of an intercepting sewer which will connect all the submains and laterals. Bids will soon be received for the work.

†Havelock, Neb.—The contract for constructing sewers has been awarded to the WILSON REINFORCED CONCRETE CO., Wahoo, at approximately $6000.

Bismarck, N. D.—Bids will be received by R. H. Thistlethwaite, City Audr., until 8 p.m., Oct. 9, for a lateral sewer in First St.

Billings, Mont.—Bids will be received by L. E. Torrence, City Clk., until 8 p.m., Oct. 6, for constructing sewers in District Nos. 120 and 118.

✚Tulsa, Okla.—A contract for constructing a sanitary sewer system in District No. 92 has been awarded to C. O. FRYE.

✚Pocatello, Idaho—A contract for constructing a sewer in District No. 9 has been awarded to R. M. BARDSEN, Lewiston, at $33,284.

✚Astoria, Ore.—The contract for constructing a sewer system in Reclamation District No. 1 has been awarded to K. SAUSET, Bellingham, at $35,189.

Mount Angel, Ore.—The City Council is negotiating for the construction of a system of septic tanks.

✚Los Angeles, Calif.—T. J. SHEA has been awarded the contract at $237,000 for constructing a storm sewer in Santa Monica Blvd., known as the Madison-Virgil storm sewer.

✚San Francisco, Calif.—The Board of Public Works has awarded a contract for the construction of a sewer in Fulton St., to E. ROLANDI, at $21,372.

Santa Barbara, Calif.—An entirely new sewer system is being planned for Santa Barbara. George P. Robinson is City Engr.

Hamilton, Ont.—Bids will soon be received by the City Council for constructing one mile of concrete sewers. The estimated cost is $110,000. A. F. Macullum is Engr.

Montcalm, Que.—See item under "Water Supply and Irrigation."

✚Moose Jaw, Sask.—Contracts for constructing sewers under Contracts Nos. 88 and 89 have been awarded to E. F. GEDNEY, Kerrobert, Sask., at $13,676 and $15,979, respectively.

GARBAGE

Boston, Mass.—Bids will be received until Oct. 14 by the Public Works Dept., for the construction of refuse receiving stations on Ward St., Roxbury District. L. K. Rourke is Comr.

Nutley, N. J.—The Board of Health is considering the installation of a garbage incinerator. Dr. Royal Langdon is the Chmn.

STREETS AND ROADS

Augusta, Maine.—The following bids were received by the State Highway Commissioner for constructing two sections of highways in Carmel, (a) 2.44 miles, Sect. No. 1, and (b) 2.89 miles in Sect. No. 2: Mitchell & Johnson, Oakland; (a) $14,360, (b) $14,538; Thompson & Shannon, East Newport, (a) $13,708; Mullen & Hughes, Bangor, (a) $12,757, (b) $12,949; H. L. Baker, Woolwich, (a) $14,854; Small & Ingalls, Bar Harbor, (b) $17,378.

Nashua, N. H.—All bids received Sept. 14 by the Board of Public Works for improving Bridge St. have been rejected. The City will do the work. Noted Sept. 10.

✚Boston, Mass.—The contract for constructing bitulithic pavement on Washington St., in Dorchester District, has been awarded to JAMES DOHERTY, at $9259. Other bids were: Warren Bros. Co., $9439; John F. Beatty, $9592; William J. Rafferty Co., $9686. Noted Sept. 17.

✚The contract for constructing a bituminous macadam roadway on Rowe St., West Roxbury District, has been awarded to WEST ROXBURY TRAP ROCK CO., at $7579. Other bids were: Martino De Matteo, $7912; John Kelly Co., $8293; James Doherty, $8481; William J. Barry, $8543; John F. Beatty, $8694; Wiliam J. Rafferty Co., $8841; Thomas F. Minton, $9446. Noted Sept. 17.

✚The contract for building 4200 lin.ft. of bermudez macadam state road in Wrentham was awarded by the Highway Commission to the FRAMINGHAM CONSTRUCTION CO. at $9705 for trap rock and $9023 for local stone. Other bids were: Lane Quarry Co., Hingham, $10,194, $9322; W. D. Smith, Wrentham, $10,454, $9209; H. L. Thomas, Middleboro, $10,983, $10,994; N. E. Construction Co., Worcester, $11,084, $10,536; C. F. Alger, Tamiton, $11,119, $9517; Snow & Farrington, $11,588, $9933; P. W. Ruckle, Providence, R. I., $11,739, $9327; W. Cressy, Cranston, R. I., $11,825, $11,212; Joseph McCormick, East Providence, $12,863, $11,760. Noted Sept. 17.

✚Hartford, Conn.—Contracts for state road work, bids for which were received Sept. 15, have been awarded by the State Highway Commissioner as follows:

City of New Britain, about 4550 lin.ft. macadam construction on South Stanley St., to A. B. CADWELL, New Britain, approximately $7630. Also, about 7556 lin.ft. reinforced concrete construction on Stanley St., to the PIERSEN ENGINEERING & CONSTRUCTION CO., Hartford, approximately $18,584.

Norwich Township, about 5050 lin.ft. macadam resurfacing on Norwich Ave., to WILLIAM B. WILCOX, Norwich, approximately $5537.

Ridgefield Township, about 11,796 lin.ft. native stone macadam construction on the Danbury Turnpike, to A. B. CADWELL, New Britain, approximately $21,872.

Thompson Township, about 3754 lin.ft. reinforced concrete construction on the North Grosvenordale Road, to A. VITO CONSTRUCTION CORPORATION, Thompson, approximately $10,050.

Clinton Township, about 1663 lin.ft. reinforced concrete on Main St., to FRANK ARRIGONI & BRO., Middletown, $4630.

Harwinton Township, about 4161 lin.ft. native stone macadam construction on the Torrington Road, to JOHN DE MICHIEL & BRO., Torrington, approximately $8000.

West Hartford Township, a section of bituminous concrete on Farmington Ave., to EDWARD BALF CO., Hartford, approximately $7035.

Bethlehem Township, a section of native stone resurfacing on the Morris Road, to JOHN DE MICHIEL & BRO., Torrington, approximately $5100.

New Milford Township, about 15,225 lin.ft. native stone macadam construction on the Danbury Turnpike, to R. G. MILLER CONTRACTING CO., Hartford, approximately $25,000. Noted Sept. 10 and 24.

✚Hartford, Conn.—Contracts for road work have been awarded by the State Highway Commissioner as follows: Darien Township, a section of reinforced concrete pavement on Mansfield Ave. to W. H. ARTHUR, Stamford, at $8000. Washington Township, a 50-ft. span reinforced concrete bridge and a section of native stone road, to EDMUND P. WALL, Torrington, for $9487. Noted Sept. 24.

New York, N. Y.—(Borough of Bronx)—(Official)—Bids will be received until 10:30 a.m., Oct. 8, by Douglas Mathewson, Borough Pres., for paving with sheet asphalt on a concrete foundation, the roadway of Kelly St. from Intervale Ave. to East 163d St. and setting curbs along same route.

(Borough of Bronx)—(Official)—See item under "Bridges."

(Borough of Queens)—(Official)—Bids were received Sept. 14, by Maurice E. Connolly, Pres. of the Borough of Queens, for improving Metropolitan Ave. from Dry Dock Harbor Road to Fulton St. as follows: Aztec Asphalt Co., Inc., $21,555; Borough Asphalt Co., $26,429; Uvalde Contracting Co., $29,503; Barber Asphalt Paving Co., $31,307; Sicilian Asphalt Paving Co., $38,060; Cleveland Trinidad Paving Co., $38,665; Henry J. Mullen Contracting Co., $49,484. Noted Sept. 10.

✚Audubon, N. J.—The Borough officials have awarded a contract for concrete paving, including gutters, curbs and walks, on all local thoroughfares still unimproved, to the LeCATO CONSTRUCTION CO., at approximately $70,000.

✚Cranford, N. J.—The Borough Council has awarded the contract for macadamizing Center St. and Spruce Ave., to CHARLES LENTZ, Rahway, at $7848.

Jersey City, N. J.—The Board of Chosen Freeholders of Hudson County has had plans and specifications prepared for the improvement of the Paterson Plank Road, from Homestead Station to Secaucus, with granite blocks on concrete foundation.

New Brunswick, N. J.—(Official)—Bids were received by the Board of Chosen Freeholders of Middlesex County, Sept. 21, for resurfacing a section of the Middlesex-Essex Road with bituminous concrete, as follows: T. H. Riddle, New Brunswick, $65,214; Conrad Sebolt, New Brunswick, $81,229; Northern Construction Co., Newark, $76,396. Noted Sept. 17.

Paterson, N. J.—Bids will be received by the Board of Public Works, until Oct. 6, for paving parts of Fulton Place, Mercer, Sussex and other streets with macadam.

West New York (Weehawken post office), **N. J.**—Bids will be received by the Town Council, until Oct. 13, for opening Palisade Ave. from 12th St. south.

✚Carbondale, Penn.—The contract for paving South Church St. and Gordon Ave. with brick has been awarded to JOHN BOOTH, 1942 Forbes St., Pittsburgh.

✚Connellsville, Penn.—The contract for paving Baldwin and Ashland Aves. has been awarded to SAMUEL HOLMES & CO., Scottsdale, at $11,192. The only other bid was that of Duggan & Miller, $12,535. Noted Sept. 3.

✚Kingston, Penn.—The contract for paving Penn and Grove Sts. has been awarded to D. M. ROSSER, at $21,640.

Petersburg, Va.—According to press reports bids will soon be received by the City Council for the improvement of River, Rock, Old and Second Sts.

✚Philadelphia, Penn.—The contract for resurfacing Welsh Road from Bustleton Ave. to Frankford Ave. with macadam has been awarded to the UNION PAVING CO. at $14,867.

✚Pittsburgh, Penn.—The contract for improving the Ingomar and Perryville Road has been awarded to D. W. CHALLIS & SONS, Sewickley at $60,539.

✚Baltimore, Md.—Contracts have been awarded by the State Road Commissioners, 601 Garrett Bldg., Baltimore, to P. FLANIGAN & SON, 120 East Lexington St., at $24,816, to pave Liberty and Cathedral Sts., from Baltimore to Peabody Alley, with asphalt or granite block, with bituminous filler, at the option of O. E. Weller, Chn.

Bids will be received by the Board of Awards, City Hall, at the City Register's Office, until Oct. 7, for grading, curbing and paving Plover, Mace, Morton and other alleys, under Contract No. 96; covering 7700 sq.yd. cement concrete paving; South St., from Lombard to Baltimore St., and Guilford Ave., from Baltimore to Fayette St., Contract No. 89, requiring 1950 sq.yd. wood block paving and 1250 sq.yd. granite block paving; Dover St., from Fremont to Eutaw St., and various alleys, Contract No. 97, 3670 sq.yd. vitrified block paving and 3500 sq.yd. granite block repaving.

Moundsville, W. Va.—Bids will be received by the City Council, until Oct. 3, for constructing concrete sidewalks on First, Second and Third Sts., and Grant, Baker and Lafayette Aves. O. B. Bonar is City Clk.

Asheville, N. C.—Bids will be received by County Commissioners, until Oct. 17, for regrading and resurfacing Asheville Road to Weaverville Road.

Macon, Ga.—An election will be held Nov. 3 to vote on the proposition of issuing $150,000 in bonds for road construction.

Plant City, Fla.—At an election recently held, $20,000 in bonds were voted for street improvement.

✚Lafayette, Ala.—The Commissioners of Chambers County have awarded the contract to STANLEY & SINGER at $10,542 for grading ten miles of the Lafayette-Opelika Road.

Ozark, Ala.—Bids will be received by the County Commissioners, until Oct. 14, to improve a part of the Ozark and Ariton Road. The estimated cost is $6542. W. S. Keller, Montgomery, is State Highway Engr. Noted Sept. 10.

Port Allen, La.—West Baton Rouge Parish has voted $75,000 in bonds for road construction. Noted Aug. 20.

✚Jackson, Tenn.—The contract for paving College and Chester Sts. with bitulithic material has been awarded to the SOUTHERN BITULITHIC CO., Nashville.

✚Louisville, Ky.—The contract for improving Market St. from 17th to 22d St. and First St. from Kentucky to Oak St. has been awarded to the LOUISVILLE ASPHALT PAVING CO. at $38,800.

Taylorsville, Ky.—An election will be held Nov. 3 to vote on the proposition of issuing $30,000 in bonds to construct roads and bridges.

Cincinnati, Ohio—(Official)Bids will be received by Philip Fosdick, Dir. of Pub. Ser., until noon, Oct. 6, for improving a section of Gilbert Ave.

(Official)—Bids will be received by the Board of County Commissioners, until noon, Oct. 23, for improving Humphrey's Hill, in Symmes Township, and Hoover Road, in Whitewater Township. Albert Reinhardt is Clk. of the Bd.

+Crooksville, Ohio—The contract for paving North Buckeye and China St. with brick has been awarded to BOCK & SON.

+Lima, Ohio—Bids have been received for paving South Metcalf St. as follows: H. C. Enck, Lima, $22,894; E. C. Freshwald, Chester, W. Va., $21,705; A. L. Metheany, Lima, $23,920; Summers & Hardin, Lima, $24,963; Blodget & Mullin, Lima, $22,830; Hedges & Dye, Covington, Ky., $25,976; Jameson & Blosser, Lima, $24,284; TOY & MULLIGAN, Lima, $20,308 (awarded contract). Noted Aug. 27.

Marysville, Ohio—Charles A. Morelock, Audr. of Union County, will receive bids until Oct. 3, for constructing the Samuel Road in Darby and Union Townships.

+Massillon, Ohio—PHILIP DIEFENBACHER & SONS have been awarded the contract for improving Front St. at $23,000.

Norwalk, Ohio—H. J. Pierson, Dir. of Pub. Ser., will receive bids Oct. 5 for the improvement of Carter St., by grading and paving the roadway with bithulithic or wood block.

Piqua, Ohio—The County Commissioners have decided to straighten the Troy Pike at an estimated cost of $17,000.

Steubenville, Ohio—Bids will be received by the Auditor of Jefferson County until Oct. 23 for the sale of $18,000 and $65,000 in bonds for road improvements.

Indiana—(Official)—Bids will be received as follows for road improvements in Indiana:

Muncie, until 10 a.m., Oct. 14, by the Commissioners of Delaware County for constructing a crushed stone road in Union Township. F. M. Williams is Audr.

Mt. Vernon, until 2 p.m., Oct. 15, by the Commissioners of Posey County for constructing 9475 ft. of road in Black Township. J. R. Haines is Audr.

Spencer, until 2 p.m., Oct. 17 by the Commissioners of Owen County for constructing macadamized roads in Clay and Lafayette Townships. G. W. Stwalley is Audr.

Auburn, until 10 a.m., Dec. 9, by the Commissioners of De Kalb County for constructing a road on the Butler-Jackson Township line. A. W. Madden Audr.

Winchester, Ind.—(Official)—Bids will be received by the Common Council until 8 a.m., Oct. 15 for constructing 4250 sq.yd. of concrete pavement. S. D. Fox is City Clk.

+Detroit, Mich.—(Official)—Contracts have been awarded for paving Romeyn St. to the DETROIT ASPHALT PAVING CO. at $8739; Fort St. from Wilkie to Elsmere St. to E. PORATH & SON at $13,518; Holcomb Ave. from Kerscheval to Mack St. to E. MEREDITH CO. at $22,086.

Oskaloosa, Iowa—(Official)—Bids will be received by the City Council until 8 p.m., Oct. 2, for grading, paving, curbing and guttering a number of streets. T. H. Cartin is City Clk.

Hastings, Minn.—Bids will be received by A. P. Hoffman, County Audr. until 1:30 p.m., Oct. 6, for constructing a section of state road, No. 8.

Leavenworth, Kan.—The City Commissioners have accepted plans and specifications of John B. Franks, City Engr., for paving and curbing Sixth St. from Choctaw to Oak St.

Pierre, S. D.—Bids will be received by James A. Quigg, County Audr., until 2 p.m., Oct. 6, for grading approximately 1057 cu.yd. on the Black and Yellow Trail.

Grand Forks, N. D.—Bids will be received by W. H. Alexander, City Audr. until 4 p.m., Oct. 5, for grading University Ave.

+Kansas City, Mo.—Contracts have been awarded for paving Montgall St. from 15th to 18th to A. JAICKS & CO., 20th St. from Baltimore to Grand St. to J. C. LYLE at $7896; 31st St. from McGee to Troost St. to E. D. TYNER & CO., at $7391.

+Springfield, Mo.—The City Council has awarded the contract to JARRETT-RICHARDSON PAVING CO. for paving Kimbrough St. from St. Louis to Elm St. The approximate cost of the work is $20,000.

+Pine Bluff, Ark.—The contract for graveling Olive St. from 20th to 26th Ave. has been awarded to C. E. PHILPOT.

+Goldendale, Wash.—A contract for changing and grading permanent highway No. 4, Maryhill Mountain Division, has been awarded to J. H. SELLERS, at $12,280.

+Seattle, Wash.—The Board of Public works has awarded contracts for paving 47th Ave. Northwest to J. J. MANEY, at $20,445; sandstone paving on West Less St. to JOHN G. PIERCE, at $3582 and for planking 26th Ave. Southwest to SWAN & BJORK, at $8356.

Walla Walla, Wash.—All bids received for paving Clifton, Alvarado and Estrala St., have been rejected. H. L. Wilson Co., at $8855 for crushed rock base, asphalt or concrete top, was low. The work covers a distance of 3600 ft. New bids will be asked.

Astoria, Ore.—All bids submitted for improvement of Alameda Ave., from Columbia to Ilwaco Ave., and for improvement of Date St. have been rejected and new bids, under revised specifications, will be asked.

Brawley, Calif.—The city contemplates spending about $40,000 for street improvement work.

Sacramento, Calif.—The citizens of Sacramento County will vote Oct. 16 on the proposition to issue $2,245,000 in bonds for the construction of the Sacramento River Road.

Los Angeles, Calif.—Bids will be received by the Board of County Supervisors, until 2 p.m., Oct. 13, for macadamizing one mile of county road, known as Section Center Ave.

Sacramento, Calif.—(Official)—Bids were received, Sept. 21, by the State Highway Commission, for constructing roads in various counties, as follows: (a) Santa Barbara County, Sect. 3, Route 2; (b) Santa Clara County, Sect. B, Route 5; (c) Contra Costa County, Sect. B, Route 14; (d) Glenn County, Sect. A, Route 7; (e) Siskiyou County, Sect. A, Route 3—R. H. McCray Co., Los Angeles, (a) $72,294; J. N. Calback, San Diego, (a) $58,923; Lyman S. Atkinson, Los Angeles, (a) $86,633; Occidental Construction Co., Los Angeles, (b) $95,513; Palmer & McBryde, San Francisco, (b) $100,668, (c) $60,879, (e) $81,794; Paterson & Grier, San Francisco, (b) $81,110; Mahoney Bros., San Francisco, (b) $89,583, (c) $59,430; W. J. Schmidt, Berkeley, (b) $87,223; John A. Marshall, Berkeley, (b) $72,626; P. L. Burr, San Francisco, (b) $88,130, (c) $48,821; F. F. Prendergast, Los Angeles, (b) $95,160; Bates, Barland & Ayer, Oakland, (b) $99,415, (c) $42,097; Berry, Mackie & Co., San Francisco, (b) $85,490, (c) $55,311; James H. Smith, San Francisco, (c) $52,024; O'Brien Bros., Sansalito, (c) $50,346; F. Rolandi, San Francisco, (c) $68,925, (e) $72,672; A. W. Gorrill, San Francisco, (d) $47,964; E. T. Johnson, Portland, Ore., (e) $71,613; Moffett & Mead, San Francisco, (e) $124,026; Toohey & Johnson, Phœnix, Ariz., (e) $67,123. Noted Sept. 10.

+San Francisco, Calif.—The Board of Public Works has awarded a contract for the paving of Fulton St., from 25th Ave. westerly, to the FAY IMPROVEMENT CO., Phelan Bldg., at $13,355.

San Jose, Calif.—J. G. McMillan County Surveyor of Santa Clara County, is preparing preliminary plans for a highway through Pacheco Pass. The total cost of the road through the pass is estimated at $170,000.

Santa Barbara, Calif.—The City Council has rejected all bids for the paving of Valerio St.

Santa Rosa, Calif.—An election will be held, Nov. 3, to vote on the proposition of issuing $1,600,000 in bonds for permanent road improvements.

Whittier, Calif.—Bids will be received by the City Trustees, until 7:30 p.m., Oct. 5, for paving approximately 100,000 sq.ft. on Philadelphia St. with asphalt.

+Galt, Ont.—The contract for improving Ainslie St. North has been awarded to the WARREN BITULITHIC PAVING CO.

+Kingston, Ont.—The City Council has awarded the contract to the KINGSTON CONSTRUCTION CO. for paving Princess St.

+Ottawa, Ont.—A contract for constructing 23,800 sq.yd. of asphalt, 12,900 lin.ft. of gutter and 2900 sq.yd. of stone blocks has been awarded to the UNION CONSTRUCTION CO. at $71,110.

The City Council contemplates constructing an asphalt pavement on Gloucester St.

Owen Sound, Ont.—The Town Council has authorized the construction of a concrete roadway on Tenth St. The estimated cost of the work is $500,000.

+Niagara Falls, Ont.—A contract for constructing 1700 sq.yd. of concrete sidewalks has been awarded to FERRIS & MANLEY.

Niagara Falls, Ont.—(Official)—Bids will be received by the Queen Victoria Niagara Falls Park Commissioners, until noon, Oct. 5, for constructing about 8500 ft. of concrete roadway through the villages of Bridgeburg and Fort Lee. John H. Jackson is Supt.

+Windsor, Ont.—The contract for resurfacing a section of Chatam and Park Sts. has been awarded to the CANADIAN DOLARWAY PAVING CO., LTD., Royal Bank Bldg.

INDUSTRIAL WORKS

+Milford, Mass.—The contract for the erection of the reinforced concrete storehouse and coal shed for the Milford Water Works, has been awarded to the J. W. BISHOP CO., 109 Foster St., Worcester, Mass. William Wheeler, 14 Beacon St., Boston, is the Engr.

Worcester, Mass.—Bids will be received until Oct. 1, for the construction of the leather plant for the Graton & Knight Mfg. Co., 344 Franklin St.

+Bridgeport, Conn.—The contract for the construction of the addition to the Frisbie Pie Co. has been awarded to the T. J. PARDY CONSTRUCTION CO. Noted Sept. 17.

Hartford, Conn.—Bids will be received until Oct. 5, by Ford, Buck & Sheldon, Inc., 60 Prospect St., Hartford, for the construction of buildings at the plant of the Capitol City Lumber Co.

Norwalk, Conn.—The Neptune Hardware Mfg. Co. contemplates erecting a factory in Keyser Place. The estimated cost is $11,600.

Cortland, N. Y.—The Cortland Carriage Goods Co. will erect a one-story addition to its plant, 162x300 ft.

Mount Vernon, N. Y.—Plans are being prepared by S. A. Guttenburg, Proctor Bldg., for a factory, 40x110 ft., for the Benford Mfg. Co., manufacturer of spark plugs.

Newburgh, N. Y.—The Stroock Plush Works will erect a three-story addition to its plant. A. B. Hagar, 50 Church St., New York, is Pres.

New York, N. Y.—(Borough of Brooklyn)—Plans have been completed for the construction of a garage at Albany Ave. and Herkimer St., for John W. Sullivan.

+New York, N. Y.—(Borough of Queens)—The contract for the construction of the five-story factory at Williams St. and Harris Ave., Long Island City, has been awarded to J. ODELL WHITENECK, 231 West 18th St., New York.

+Rochester, N. Y.—Contracts for alterations and the one-story addition to the factory of the Ritter Dental Mfg. Co. have been awarded as follows: Structural steel, F. L. HEUGHES CO.; masonry, EDWARD STANCHEN; carpentry, W. F. MASS CO., Rochester.

Union, N. J.—Plans have been prepared by C. F. Long, Arch., 1 Montgomery St., Jersey City, for the construction of a three-story factory at Union for the Premier Briar Pipe Co. The estimated cost is $30,000.

Lewiston, Penn.—Plans are being prepared by C. Howard Lloyd, Harrisburg, Penn., for the construction of a three-story brick warehouse, 40x100 ft., for Whitman, Swartz & Co. The estimated cost is $15,000.

Philadelphia, Penn.—Plans are being prepared by M. Haupt for alterations and additions to the six-story factory at 13th and Cherry Sts. for Abraham Steinfeld. The estimated cost is $20,000.

Philadelphia, Penn.—Watson & Huckle, Archs., 1211 Walnut St., Philadelphia, are preparing plans for the construction of a two-story, 30x200-ft. brick factory for the Hess Bright Mfg. Co. The estimated cost is $20,000.

✚The contract for the construction of the one-story addition, 208x112 ft. on Nixon Ave., for the Nixon Paper Co., has been awarded to the BARCLAY WHITE & CO., Philadelphia, Penn., at $33,000.

Baltimore, Md.—The Oriental Rug Co. will erect a three-story mill and warehouse. The estimated cost is $10,000. Stanislaus Russell, 2900 Clifton Ave., Baltimore, is the Arch.

✚**Norfolk, Va.**—The contract for the construction of the warehouse for the Security & Safe Deposit Co. has been awarded to the RICHARDSON CONSTRUCTION CO., Norfolk, at $30,000.

✚**Tallahassee, Fla.**—The contract for the construction of the warehouse, for the Mutual Warehouse Co., has been awarded to O. H. PARKER, Tallahassee.

Avondale (Birmingham Post office), **Ala.**—The International Export Co. contemplates erecting an oil plant at Avondale. The estimated cost is $1,000,000. J. A. Landry, 620 Audubon Bldg., is interested.

✚**Jackson, Miss.**—The contract for constructing the roundhouse and buildings for the Illinois Central R.R. has been awarded to GEORGE B. SWIFT & CO., Chicago, Ill.

✚**Memphis, Tenn.**—The contract for constructing a roundhouse at Forrest Yards, for the Southern Ry., has been awarded to the CONSOLIDATED ENGINEERING CO., Baltimore, at $60,000.

✚The Southern Ry. has awarded the contract for the construction of shop buildings to the RAGLAND, BAXTER MORFORD CO., Nashville, Tenn.

Canton, Ohio—The Stark Broom Co., Canton, Ohio, recently incorporated with a capital of $30,000, will construct a broom factory in Canton. L. A. Maust and A. O. Hard are interested.

✚**Cleveland, Ohio**—The Enamel Products Co. has awarded the contract to WILLIAM DUNBAR & CO., Cedar Ave., Cleveland, for constructing a factory. It will be 75x250 ft.

Galion, Ohio—The American Metallic Grave Vault Co., Galion, will make extensions and improvements to its present plant.

✚**Toledo, Ohio**—The Turner Realty Co. has awarded the contract to S. J. PICKETT, Toledo, for constructing a five-story concrete warehouse, at about $75,000.

Hartford City, Ind.—The South Bend Pickle Works, South Bend, Ind., plans to construct a factory at Hartford City. Estimated cost, $10,000.

Indianapolis, Ind.—The National Automobile Co., Indianapolis, will construct a factory addition.

✚**Laporte, Ind.**—The contract for constructing a factory at Laporte has been awarded to the LARSON-DANIELSON CO., Laporte. Estimated cost, $125,000.

Chicago, Ill.—The Chicago & Alton R.R. Co., Chicago, will construct a roundhouse to cost $20,000.

Dallas, Ill.—Fred and A. S. Dusenberg, Dallas, plan to construct a factory at Dallas for the manufacture of "Dusenberg" engines and cars.

East St. Louis, Ill.—The Central Pinch Bar & Machinery Co., East St. Louis, plans to construct a factory to cost $35,000.

Milwaukee, Wis.—Schnetzky & Son, Archs., Germania Bldg., Milwaukee, are receiving bids for the construction of a freight warehouse for the Chicago, Racine & Milwaukee Boat Line, at the foot of Erie St. Estimated cost, $10,000.

New London, Wis.—The Engel-Kress Mfg. Co., West Bend, Wis., plans to construct a factory at New London. E. C. Jost, Chn. Local Advancement Association, is interested.

Sheboygan, Wis.—The Sheboygan Fibre Furniture Co. will construct a new factory. Estimated cost, $12,000.

Denison, Iowa—The Denison Bottling Works plan to construct a two-story and basement plant.

Duluth, Minn.—The Minnesota Glove & Fur Mfg. Co., Duluth, recently incorporated, plans to construct a glove factory in Duluth. Estimated cost $35,000. Percival M. Young is Pres.

Duluth, Minn.—A. R. Weins, Milwaukee, Wis., plans to construct a brush factory at Duluth. Estimated cost, $50,000.

St. Louis, Mo.—The V. Viviano & Bros. Co., Seventh and Carr St., St. Louis, will construct a six-story factory addition at its macaroni plant.

Dallas, Tex.—The Commissioners of Smith County have appropriated $15,000 for the purpose of constructing warehouses in various parts of the county.

Portland, Ore.—The Pacific Iron Works, Portland, is receiving bids for its proposed plant to be constructed on Clackamas St.

Bakersfield, Calif.—Several San Francisco, Calif., merchants plan to construct a warehouse at Bakersfield. Estimated cost, $40,000. T. E. Smith, Mgr. Merchants' Association of Bakersfield, is interested.

Crockett, Calif.—The Sugar Factors Co., Ltd., Honolulu, Hawaii, plans to enlarge its refinery at Crockett. Estimated cost, $500,000. Allen M. Nowell, Honolulu, is Secy. and Mgr.

Heber, Calif.—The Los Angeles Creamery Co., Los Angeles, plans to construct a creamery at Heber. Estimated cost, $25,000.

Los Angeles, Calif.—The Harbor Commission has instructed the Harbor Engineer to prepare plans and specifications for two warehouses to be erected on the outer and inner harbor at San Pedro. The buildings will be seven story structures, of reinforced concrete, about 150x600 ft. Noted Sept. 17.

Los Angeles, Calif.—Costerisan & Kavanaugh, Archs., California Bldg., Los Angeles, have completed plans and specifications for a five-story and basement Class A, reinforced-concrete warehouse to be constructed at Griffith Ave. and 31st St. for the Dixon Art Glass Co., 1386 Wall St. The building will be 80x140 ft., and will have reinforced concrete frame, roof slab and floors, brick filler walls, ruffled brick exterior facing with artificial stone trim. The cost is estimated at $60,000.

Oakland, Calif.—The California Fireproofing Co., Bankers' Investment Bldg., San Francisco, Calif., plans to construct a factory at Oakland. S. W. Barnes is Secy.-Treas.

Palermo, Calif.—Grinnel Burt and associates, of Palermo, will construct an olive pickling and canning plant. Estimated cost, $10,000.

Santa Clara, Calif.—P. A. Brangier and others of Santa Clara, plan to construct a potash plant at Lick's Mill, two miles north of Santa Clara. Estimated cost, $100,000.

Brampton, Ont.—Bids are being received by Audrey Butler, Arch., 104 Main St., Niagara Falls, Ont., for a jam factory for Lindners, Ltd., to be constructed at Brampton.

Goderich, Ont.—J. E. Baechler, Goderich, plans to construct an addition to his furniture factory. Estimated cost, $50,000.

Hamilton, Ont.—Proctor & Gamble, Cincinnati, Ohio, will construct a factory at Hamilton. Plans have been prepared.

St. Catharines, Ont.—The Marathon Rubber Co., Akron, Ohio, is having plans prepared for a plant to be constructed at St. Catharines. Estimated cost, $50,000.

Medicine Hat, Alta.—The Saskatchewan Bridge & Iron Co., Medicine Hat, plans to construct a plant to cost $200,000.

Lulu Island, B. C.—The British Columbia Steel Works, Lulu Island, plan to construct additional buildings. A site of five acres has been purchased.

FEDERAL GOVERNMENT WORK

Repairing Vessel—Portland, Maine—Bids will be received by the Lighthouse Inspector, Portland, until 2 p.m., Oct. 22, for docking and repairing Portland light vessel.

Appraisers Stores—Boston, Mass.—The government will construct appraisers stores at Otis Wharf, Atlantic Ave., Boston, to cost about $1,250,000. W. N. Collier, Post Office Bldg., is in charge.

★**Coal**—New York, N. Y.—(Official)—Bids will be received until noon, Oct. 8, by Col. S. W. Roessler, Army Bldg., for furnishing and trimming into U. S. dredges during the period ending Sept. 30, 1915, 9000 to 25,000 tons (more or less) of bituminous coal.

Lighting Fixtures, Etc.—New York, N. Y.—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Oct. 22, for installing a conduit and wiring system, and lighting fixtures at the U. S. appraiser's warehouse, New York, N. Y.

Repairs To Building—Trenton, N. J.—Bids will be received at the office of the Custodian, U. S. Post Office, Trenton, until 2 p.m., Oct. 19, for making repairs to the building.

✚**Storehouses**—Philadelphia, Penn.—The contract for constructing the artillery and metal storehouses at the Frankford Arsenal, has been awarded to P. J. HURLEY, 1233 Cherry St., Philadelphia, at $17,977 and $11,958 respectively. Noted Sept. 10.

Porches—Philadelphia, Penn.—(Official)—Bids will be received by H. R. Stanford, Ch. Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a.m., Oct. 10, for constructing porches on marine officers quarters, Nos. 4 and 5, Navy Yard, Philadelphia.

✚**Cement Sidewalks**—Washington, D. C.—The contract for constructing about 70,000 sq.yd. of cement sidewalks has been awarded to EDWARD G. GUMMEL, Washington, D. C., at 96c. per sq.yd.

Road Work—Washington, D. C.—The following bids were received by the Depot Quartermaster, Washington, for completing the road from Highway Bridge to Arlington, Va. R. E. Boiseau, Washington, D. C., $8480; Lyons Bros., Washington, D. C., $9450; Harper & Voight, Washington, D. C., $9750; L. M. Johnson, Washington, D. C., $8197.

Lintels—Washington, D. C.—Bids will be received by the Commissioners, District of Columbia, District Bldg., until 2 p.m., Oct. 5, for furnishing and delivering c.-i. lintels for the windows and steel lintels for the east and west entrances at the Bryan School Bldg., B St., between 13th and 14th St., S. E.

Refrigerating Apparatus—Washington, D. C.—Bids were received on Sept. 23, by Lieut. Col. J. E. Kuhn, Washington Barracks, for furnishing refrigerating apparatus from H. W. Johns-Manville Co., New York, N. Y., at $8037; and Clothel Co., New York, N. Y., at $7815.

Skylights—Washington, D. C.—The following are the bids received Sept. 22, for installing skylights in the Patent Office Bldg., Washington; Concord Construction Co., New York, N. Y., $38,421; J. D. Thompson, Washington, D. C., $27,204; Upton-Smoot Co., Washington, D. C., $29,989; W. A. Fingle, Baltimore, Md., $37,311; Mills-Johnson Co., New York, N. Y., $21,900; H. J. Gichlas, Washington, D. C., $19,421; John Bird, Philadelphia, Penn., $26,492; Arthur Cowsill, Washington, D. C., $22,444; J. L. Marshall, Washington, $29,388; National Ventilating Co., New York, N. Y., $32,550; David Lupton, Philadelphia, Penn., $36,300.

★**Laundry Machinery**—Washington, D. C.—(Official)—Bids will be received by B. O. Sweeney, Asst. Secy., Dept. of the Interior, for installing laundry machinery in the Government Hospital for the Insane at Anacostia. For further information see item under "Contracts To Be Let."

✚**Post Office**—Wytheville, Va.—The contract for constructing the post office at Wytheville has been awarded to W. H. FISSEL & CO., New York, N. Y., at $51,883. The building will be of limestone.

Turbines and Compressors—Wheeling, W. Va.—Bids will be received by Maj. J. P. Jervey, Engineers Office, Wheeling, until 11 a.m., Oct. 26, for furnishing and delivering two 60-hp. water turbines and two 250 cu.ft. air compressors at dam No. 28, Ohio River.

✚Post Office—Rocky Mount, N. C.—The contract for constructing the post office at Rocky Mount has been awarded to the J. S. ROGERS & CO., Moorestown, N. J., at $62,633. The building will be of limestone.

Roofing Material—Atlanta, Ga.—Bids will be received by F. H. Duehay, Supt. of Prisons, Dept. of Justice, Washington, D. C., until 10 a.m., Oct. 12, for furnishing and delivering at the United States penitentiary, Atlanta, reinforcing material for roof of west main cell wing, U. S. penitentiary, Atlanta.

✚Post Office—Bardstown, Ky.—The contract for constructing the post office at Bardstown has been awarded to ROGERS & KAISER, Webster Bldg., Chicago, Ill., at $56,428.

Steel Hull—Cincinnati, Ohio—Bids will be received by Lieut. Col. H. Jervey, Custom House, Cincinnati, until 10 a.m., Oct. 28, for constructing a steel hull for Big Sandy River, W. Va., and Ky.

Steel Deck Barges—Cincinnati, Ohio—(Official)—Bids will be received until 10 a.m., Oct. 23, by Lieut. Col. H. Jervey, Custom House, Cincinnati, for constructing two steel deck barges.

✚Post Office—Winfield, Kan.—(Official)—The contract for constructing the post office at Winfield has been awarded to the DIETER & WENZEL CONSTRUCTION CO., Wichita, Kan., at $51,200. The building will be of limestone. Noted Aug. 20, and Sept. 10.

Post Office—Mandan, N. D.—The following are the bids received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for constructing a post office at Mandan: (a) limestone; (b) sandstone: George W. Stiles Construction Co., Chicago, Ill. (a) $45,000; Watt Construction Co., Mott, N. D. (a) $46,000; (b) $46,300; J. W. Miller, St. Paul, Minn., (a) $47,439. Noted Aug. 20.

✚Post Office—Brigham City, Utah—The contract for constructing the post office at Brigham City has been awarded to GEORGE A. WHITMETER & SONS, Ogden, Utah, at $50,284. Noted May 7 and June 11.

Steel Pipes—Okanogan, Wash.—Bids will be received until 2 p.m., Oct. 13, at the office of the U. S. Reclamation Service, Los Angeles, Calif., until 2 p.m., Oct. 13, for erecting riveted steel pressure pipes for the Okanogan project.

★Lantern—Portland, Ore.—(Official)—Bids will be received by the Lighthouse Inspector, Portland, until 2 p.m., Oct. 10, for furnishing one standard fourth order lantern.

Quay Wall—Mare Island (Vallejo post office), Calif.—Bids were received by the Chief of the Bureau of Yards and Docks, Navy Department, Washington, D. C., on Sept. 19, for pile and lumber work for reconstructing the quay wall at the navy yard, Mare Island, Calif., from the Thompson Bridge Co., 103 Main St., San Francisco, at $20,534, and the Healy-Tibbitt Construction Co., San Francisco, at $30,000.

Tower and Tank—Honolulu, Hawaii—Bids will be received until 3 p.m., Oct. 27, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a concrete water tower, concrete tank, etc., at the quarantine station, Honolulu.

✚Cold-Storage Plant—Pearl Harbor, Hawaii—The contract for the construction and equipment of an ammonia ice-making and refrigerating plant, has been awarded to the VILTER MFG. CO., Milwaukee, Wis., at $18,600. Noted July 30 and Sept. 3.

Steel—Philippine Islands—(Official)—The following are the bids received by Col. S. W. Roessler, Corps Engrs., U. S. A., Room 707, Army Bldg., New York, N. Y., for furnishing structural steel for the Philippine Islands: Theodore Smith & Sons, $6681; United States Steel Export Co., $5991; Riter-Connelly Mfg. Co., $7740; Independent Bridge Co., $7700; Pennsylvania Bridge Co., $6340. Noted Sept. 17.

MISCELLANEOUS

✚Fire Cable—Boston, Mass.—The contract for furnishing the fire department with rubber insulated lead covered cable has been awarded to the STANDARD UNDERGROUND CABLE CO., at $7201. Other bids were: National India Rubber Co., $8114; F. M. Ferrin, $8285; Safety Insulated Wire & Cable Co., $8377.

Wharf—Boston, Mass.—Bids will be received until Oct. 8, by the Public Works Dept., for the construction of a wharf and fender pier at Broadway Bridge. L. K. Rourke is Comr.

Seawall—Boston, Mass.—Bids will be received until Oct. 7, by the Public Works Dept., for the construction of a seawall along East First St., South Boston. L. K. Rourke is Comr.

Pavilion and Tunnel—Boston, Mass.—Bids will be received until Oct. 5, by the City Hospital Trustees for the erection of a ward pavilion and tunnel at Harrison Ave. and Northampton St., A. Schuman is the Chn. Edward P. Dana, 20 Central St., is the Arch.

✚Zoological Building—Boston, Mass.—The contract for the construction of the elephant house at Franklin Park has been awarded to JOHN F. GRIFFIN CO., at $27,916.

Barge Canal Work—Albany, N. Y.—Duncan W. Peck, State Supt. of Pub. Wks., will receive bids until noon, Oct. 27, for the following work: (Contract 14-B, Erie Canal, Sections 1 and 2.) For closing the openings in the Crescent Dam, removing the Erie Canal aqueduct and Halfmoon Bridge at Crescent, and making repairs to the lock and dam at Vischers Ferry. Estimated cost, $79,965; (Terminal Contract No. 35), constructing a dockwall on the north bank of the Mohawk River, near the Erie Canal aqueduct, at Crescent. Estimated cost, $11,976.

Barge Canal Work—Albany, N. Y.—Bids will be received on Oct. 20, at noon, by Duncan W. Peck, State Supt., Pub. Wks., Albany, for the construction of five additional pieces of barge canal work, as follows: Contract K, for constructing the superstructure of three highway bridges at Ovid St., Bridge St. and Seneca Falls and Washington St.; Contract M, furnishing power plants, electrical equipment and machinery, for operating and lighting locks, 1, 2, 3, and 4 of the Cayuga and Seneca canal; Contract 115, building the superstructure of movable dam 4 over the Mohawk River at Scotia; Contract 55-B, replacement of gate hoists and the furnishing and installation of chain hoists and additional guides for gate stems at the Delta dam; Contract C-1, clearing the site for construction work at Seneca Falls, including the removal of 181 buildings.

✚Barge Canal Work—Albany, N. Y.—Duncan W. Peck, State Supt., Pub. Wks., has awarded contracts as follows: Raising and improving portion of highway on west side of Oswego River, Granby, I. M. LUDINGTONS SONS, INC., at $2505; completing construction of canal from Crockers Reef to Ft. Edward, HOLLER & SHEPPARD, Rochester, at $120,459; construction of bridge over Erie Canal, Yorkville, SCOTT BROS., Rome, at $94,583; Terminal Contract 324, construction of a dock wall on the east bank of Hudson River at Thompson, CHAMPLAIN ENGINEERING AND CONTRACTING CO., Saratoga Springs, at $16,843; construction of lock and removal of tide gates in Shinnecock and Peconic canal, RIVERSIDE CONTRACTING CO., New York, N. Y., at $38,368; constructing certain highways adjacent to Hinckley Reservoir, JACKSON L. RICHMOND, Little Falls, at $93,981; Contract 126, raising bridges at Mechanicsville, HORSEHEADS CONSTRUCTION CO., Horseheads, N. Y., at $6904; Contract 125, constructing substructure, superstructure and approaches of Vischers Ferry Road Viaduct, over Troy-Schenectady branch of N. Y. C. & H. R. R.R., KEITH O. GUTHRIE, Schenectady, at $41,267; improvement of Fulmer Creek, Mohawk, S. R. ROSOFF, Herkimer, N. Y., at $5875. Noted Aug. 20 and Sept. 3.

★Boiler, Stack, Etc.—Binghamton, N. Y.—(Official)—Bids will be received by the State Hospital Commission, Capitol, Albany, until 3 p.m., Oct. -9, for installing a new boiler, stack, etc., at the Binghamton State Hospital, Binghamton, N. Y. Lewis F. Pilcher, Capitol, Albany, is State Arch.

★Building Improvements—Buffalo, N. Y.—Bids will be received until noon, Oct. 19, by Dr. Thomas Finnegan, Asst. Comr. of Elementary Education, Education Bldg., Albany, N. Y., for construction of a rear porch on the principal's residence, interior telephones, clocks, program, bells and fire-alarm system for the State Normal School, Buffalo, N. Y. For further information, see advertisement under "Contracts to Be Let."

✚Subway—New York, N. Y.—(Borough of Manhattan)—(Official)—The Public Service Commission has awarded the contract for the construction of Section 21, Route 48 of the Park Place, William and Clark St. subway route to SMITH, HAUSER & McISAAC, INC., at $2,254,670. Noted Sept. 17.

✚Dredging—New York, N. Y.—(Official)—(Borough of Brooklyn)—The contract for dredging 15,000 yd. in Newtown Creek was awarded Sept. 22 to WILLIAM BEAR, at 40c. per cu.yd., scow measurement.

✚The contract for dredging 5000 yd. in Gowanus Canal was awarded to R. G. PACKARD CO., at 42½c. per cu.yd. Noted Sept. 17.

Removing Foundations, Etc.—New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by Cabot Ward, Pres., Park Bd., Municipal Bldg., Borough Manhattan, until 3 p.m., Oct. 8, for the removal of old foundations, piles, bulkheads, walks, floors, columns, etc., also excavating and grading at Seaside Park. This contract has been abandoned by Charles O'Hara.

Roof Repairs—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received by John A. Kingsbury, Comr., Dept. Public Charities, Municipal Bldg., until Oct. 8, for laying new tin roof and repairing slate and metal work on the Metropolitan Hospital, Blackwells Island. Bids will be received on the same date also for laying new tin roof and repairing slate and sheet metal work on the T. & S. Bldg., Blackwells Island.

✚Elevated Railroad Work—New York, N. Y.—(Borough of Brooklyn)—The New York Municipal Railway Corporation, with the approval of the Public Service Commission, has awarded the contract to the EMPIRE CONSTRUCTION CO., for the installation of tracks and line equipment on the Liberty Ave. extension, at $115,987.

✚Channel Work and Dams—Rochester, N. Y.—The contract for deepening the channel from Upper Falls to the Central Ave. dam and for the construction of the movable dams has been awarded to the T. A. GILLESPIE CO., at $59,600. Noted July 9.

Wharf—Jersey City, N. J.—The Board of City Commissioners plans the construction of a city wharf at the foot of Howell St. Property for the improvement is now under negotiation.

✚Pier—Trenton, N. J.—The city has awarded the contract for the construction of a reinforced concrete and frame pier to the AMERICAN PAVING & CONSTRUCTION CO., South Ninth St., Philadelphia, Penn., at $41,490.

Fire Station and Apparatus—Westville, N. J.—The Union Fire Co. plans the erection of a fire station and the purchase of improved fire apparatus.

Motor Fire Apparatus—Williamsport, Penn.—The city is contemplating the purchase of an automobile fire truck.

Harbor Improvements—Baltimore, Md.—The Board of Estimates has approved proposed harbor loan for improvements estimated to cost approximately $1,500,000, itemized as follows: $250,000 for dredging channel to 35 ft.; $1,000,000 to complete third section of Key Highway; $350,000 to widen St. Paul St., from Center to Lexington St. O. F. L. Lackey is Harbor Engr. Noted Sept. 3.

Undergrade Crossing—Graham, Va.—The Norfolk & Western Ry. plans to construct an undergrade crosing estimated to cost $20,000. J. E. Crawford, Roanoke, is Ch. Engr.

Marine Railway and Floating Drydock—Norfolk, Va.—W. E. Thomas & Co., Norfolk, have purchased property with river frontage of 375 ft. where a 1500-ton marine railway and a floating drydock of 3500 tons capacity will be constructed. The estimated cost is $150,000.

Tunnels—Parkersburg, W. Va.—It is reported that the Charleston, Parkersburg & Northern Ry. contemplates the construction of five tunnels along the railway Parkersburg and Charleston, a distance of 75 miles. Robert Cutler is the Ch. Engr.

✚**Dock**—Charleston, S. C.—The Southern Ry. has awarded the contract for the construction of coal dock facilities at this port, to the WELLMAN-SEAVER-MORGAN CO., Cleveland, Ohio. The estimated cost is $450,000.

Terminal Docks and Building—Savannah, Ga.—See item under "Buildings."

Drainage—Bartow, Fla.—The Peace Creek Drainage District, E. L. Mack, Secy., will probably receive bids about Nov. 1 for the construction of a drainage system in central Polk County. Reclamation plan includes system of open ditches with branches and farm laterals. Total yardage about 2,431,000 cu.yd. Estimated cost, $290,372. Mellush & Broyhill, Bloomington, Ill., are the Engrs.

✚**Swimming Pool**—Gulfport, Fla.—The Bay View Development Co. has awarded the contract for the construction of a 50x150-ft. reinforced concrete swimming pool at Boca Ciega Bay, to Z. FRANKLIN POTTER, Petersburg, Fla.

✚**Dredging and Terminal Docks**—Jacksonville, Fla.—The Standard Oil Co. has awarded the contract for the construction of terminal docks and a bulkhead at Talleyrand Ave., to W. P. RICHARDSON & CO., Jacksonville. The contract for dredging slips on either side of the docks was awarded to G. W. PARKHILL.

★**Water and Sewer System**—Camp Hill, Ala.—(Official)—Bids will be received by the town until noon, Oct. 15, for constructing water and sewer systems. W. C. Newell is Mayor and Edgar B. Kay, Tuscaloosa, is Engr. For details, see advertisement under "Contracts to Be Let."

Terminal Improvement—New Orleans, La.—The New Orleans Railway & Light Co., according to press reports, plans to spend $35,000 in improvements to its terminal property.

✚**Levee**—New Orleans, La.—The Orleans Levee Board has awarded the contract for levee work to J. H. LEWIS, as follows: 1700-ft. levee from Naval Station to Orleans St., and new levee and enlargement from Orleans to Camus. Noted Sept. 17.

Tracings—Cincinnati, Ohio—Bids will be received by Philip Fosdick, Dir. Pub. Ser., City Hall, until noon, Oct. 7, for furnishing six reproductions on cloth from the tracings of the underground survey of the city of Cincinnati. The estimated number of tracings to be reproduced is 150. Specifications, from office of Division of Sewerage, 306 Odd Fellows Temple.

Metal Fence and Repairing—Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, room 513, City Hall, until Oct. 7, for furnishing metal fence for the Warrensville Reservoir, and until Oct. 9 for repairing, straightening and extending present iron fence. Plans and specifications are at the office of C. F. Schultz, Water Dept.

Tower House and Tunnel—Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, Room 513, City Hall, until noon, Oct. 9, for the construction of a tower house and tunnel for the Cleveland City Hospital group. Plans and specifications may be had from the City Architect, 420 City Hall.

Boat House—Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, Room 513, City Hall, until noon, Oct. 9, for the construction of a boat house at Shaker Lakes Park. For plans and specifications address, City Architect, 420 City Hall.

Parks and Playgrounds—Dayton, Ohio—The citizens will vote at the November election on $250,000 bond issue for the construction of parks and playgrounds.

✚**Ditch**—Valparaiso, Ind.—The contracts for the construction of a ditch for draining 20,000 acres in Porter and Lake Counties, have been awarded as follows: (Marsh portion), NORTHERN CONSTRUCTION CO., Elkhart, Ind., at $112,500; (sand portion), GREAT LAKES DREDGE & DOCK CO., Chicago, Ill., at $114,900. Noted Aug. 27.

✚**Drainage**—Babcock, Wis.—The general contract for the construction of 33 miles of drainage ditches in the Cranberry Creek District has been awarded to JOHN CORBETT, Babcock.

✚**Drainage**—Dakotah, Iowa—The contract for the construction of drainage ditch 66, including 13,000 ft. 8-in. to 30-in. main drain and 25 branches, has been awarded to JENSEN & KJAR, Humboldt, Iowa, at $32,000.

Drainage—Helena, Ark.—Helena Improvement District No. 1 will receive bids until Oct. 15, for the construction of a 3500-ft. reinforced-concrete drainage tube. The estimated cost is $35,000. Walter E. Winn is the Engr.

Levee—Helena, Ark.—The Helena Improvement Co., District No. 1, plans to construct 50,000 yd. levee embankment. Estimated cost $15,000. Walter E. Winn is the Engr.

✚**Drainage**—Bay City, Tex.—The Commissioners, Drainage District No. 5, have awarded the contract to the INTERSTATE DRAINAGE & INVESTMENT CO., Britt, Iowa, for the excavation of 19 ditches, aggregating 212,730 cu.yd. The contract for furnishing 600 lin.ft. ingot iron culverts was awarded to the LONE STAR CULVERT CO., Houston, Tex. E. N. Gustafson, Bay City, is the Engr.

Natatorium—Houston, Tex.—Hugh Hamilton, Pres., Houston Ice & Brewing Co., is having plans prepared for a municipal natatorium to cost $15,000. Cooke & Cooke, Houston, are the Archs.

Drainage—Nampa, Idaho—The Directors of the Nampa-Meridian Irrigation District will hold an election Oct. 10 to vote a $500,000 bond issue, for the purpose of constructing a drainage system in the district.

✚**Grain Elevator,** Seattle, Wash.—The Seattle Port Commission has awarded the contract for the construction of the first unit of the 1,000,000 bu. capacity grain elevator, to the W. T. BUTLER CONTRACTING CO., Seattle.

✚**Dock**—Portland, Ore.—The Oregon-Washington Ry. & Navigation Co. has awarded the contract for the construction of a 120x560-ft. dock on the East Side, to ROBERT WAKEFIELD. The estimated cost is $75,000. J. R. Holman, Ch. Engr., prepared the plans.

✚**Dredge**—Los Angeles, Calif.—The contract for the construction of a steel suction dredge for general harbor improvements reported awarded to the CRAIG SHIPBUILDING CO., to have a capacity of 20,000 cu.yd. per day. Estimated cost, $250,000.

Dams and Levees—Los Angeles, Calif.—Los Angeles County is having the preliminary surveys made and plans to build a series of dams and levees for protection from high waters. The estimated cost of the project is $9,500,000. H. Hawgood is Chmn. of the Bd. of Engrs.

Bulkhead—San Diego, Calif.—The San Diego Reclamation & Dock Co. has entered into negotiatoins with the city, and if satisfactory to both parties, plans to construct a bulkhead from Olive to Hawthorne St. The estimated cost is $25,000.

Car Loops and Foot Bridges—San Francisco, Calif.—Plans have been prepared by M. M. O'Shaughnessy, City Engr., for new car loops at the Ferry Bldg. and foot bridges over the Embarcadero. The estimated cost is $123,000.

Piers—San Francisco, Calif.—The State Board of Harbor Commissioners has authorized the calling for bids for the construction of Piers No. 16 and 18, to be located between Mission and Howard St. Each pier will be 200x800 ft. built on creosoted piles.

Elevators—Montreal, Que.—Bids will be received until Oct. 7 by the Department of Public Works for the installation of two standard passenger and six standard freight elevators, in the Examining Warehouse, Montreal. R. C. Desrochers is the Secy.

BUILDINGS

Boston, Mass.—Bids will be received, until Oct. 6, by the Schoolhouse Commissioners, for constructing a school on Blossom St.

Framingham, Mass.—Bids were received for the construction of the dormitory and refectory in connection with the State Normal School, as follows: Kennedy & Peterson Construction Co., Boston, at $67,800; J. J. Poindiville Co., South Framingham, $71,500; Charles E. Currier Co., Boston, $72,900; Whiton & Haynes Co., Boston, $73,968; Thomas P. Hurley, Marlboro, $74,500; Edward F. Miner Building Co., Worcester, $74,730; Norcross Bros. Co., Boston, $74,900; Buckley Co., $74,974; Michael J. Rousseau, $75,930; Holt, Fairchild Co., Boston, $77,326; J. W. Bishop, Worcester, $77,459; E. W. Pittman Co., Lawrence, $81,482; John W. Duff Co., $82,064; Bigelow & Harriman, Boston, $83,285; Woodbury & Leighton Co., $85,976; John J. Powers, Worcester, $89,500; Harry L. Egan, South Framingham, $92,490; Merrill & Taber, Framingham, $95,513; William Crane, $88,465. Noted Sept. 24.

Somerville, Mass.—Augustus, Mahan, Dorchester, will erect a three-story, 130x200-ft. brick apartment house on Craigie St. The estimated cost is $75,000.

✚**Springfield, Mass.**—The general contract for the construction of the mercantile building for the Liberty Realty Trust has been awarded to FRED T. LEY & CO., Springfield.

Worcester, Mass.—The lowest bid received for the construction of the Rice Square schoolhouse was submitted by the Central Building Co., at $65,290. Noted Sept. 17.

Pawtucket, R. I.—Bids will be received until noon, Oct. 7, by Edward Gagel, Ch. Engr., New Haven, Conn., for the union station at Pawtucket for the N. Y., N. H. & H. R.R. The estimated cost is $200,000.

✚The contracts for the construction of the Newport Ave. school and the Abbott St. school have been awarded to F. G. ROWLEY CO., Pawtucket, R. I. Noted Sept. 24.

Milford, Conn.—Bids will be received until 4 p.m., Oct. 9, by the Town School Commission, for a brick school at Walnut Beach. Joseph A. Jackson, 1123 Broadway, New York, N. Y., is the Arch.

New Britain, Conn.—Plans have been completed for a high school on Bassett St. It will be 164x188 ft. of brick and reinforced concrete construction. Walter P. Crabtree, 272 Main St., is the Arch. Noted June 25.

Norwalk, Conn.—Plans have been completed for a two-story and basement school on Prospect Ave. It will be two stories, 66x106 ft. Joseph A. Jackson, 1123 Broadway, New York, N. Y., is the Arch.

South Norwalk, Conn.—The Norwalk Hospital Association, contemplates the erection of a hospital on Connecticut Ave., South Norwalk. The estimated cost is $75,000.

Harriman, N. Y.—W. I. Dally, Arch., Harriman, is preparing plans for a two-story, 120x40 ft. brick high school at Harriman. The estimated cost is $45,000.

✚**Hicksville, N. Y.**—The general contract for the construction of the dormitory for the Jones Institute, Hicksville, has been awarded to JOHN D. COSGROVE, Glen Cove, L. I. The estimated cost is $65,000.

Ithaca, N. Y.—Day & Klauder, Archs., 925 Chestnut St., Philadelphia, Penn., are receiving bids for the construction of the dormitories at Cornell University. The estimated cost is $100,000.

New York, N. Y.—(Borough of Bronx)—The Cleland Realty Co. will erect an eight-story apartment house at Tremont and Anthony Aves. The estimated cost is $215,000. Frederick Jaeger, 441 East Tremont Ave., is the Arch.

Plans have been completed by Robert J. Riley, Arch., 447 Fifth Ave., for a three-story brick hospital at Featherbed Lane and Mocombs Road, for the House of Calvary. The estimated cost is $90,000.

New York, N. Y.—(Borough of Manhattan)—Plans have been completed for a 21-story office building to be erected at Broadway and 37th St., for the Robert Hoe Estate. The estimated cost is $1,000,000.

New York, N. Y.—(Borough of Manhattan)—Plans have been completed by Warren & Wetmore, Archs., 16 East 47th St., for a 12-story apartment house to be erected at Park Ave. and 54th St. The estimated cost is $500,000.

Plans have been completed by Robert T. Lyons, Arch., 119 West 40th St., for a 12-story apartment house to be erected at Park Ave. and 86th St. The estimated cost is $450,000.

The Butterick Publishing Co., Spring and McDougall Sts., contemplates the erection of a 12-story building at Hudson and Broome Sts. The estimated cost is $1,000,000.

Plans have been completed for the construction of a 12-story apartment house at Park Ave. and 54th St. The estimated cost is $500,000.

The New York Order of the Knights of Columbus contemplate erecting a clubhouse. The estimated cost is $125,000. William P. Myhan, 120 Franklin St., is Chn. of Com.

✚The general contract for the construction of the six-story brick and limestone parochial school at 147 St. Nicholes Ave., has been awarded to M. REID & CO., INC., 114 West 59th St., New York.

✚The general contract for the construction of a three-story store and loft building at 451 Fourth Ave., for the Ogden Goelet Estate has been awarded to R. H. CASEY, 246 West 16th St., New York.

Poughkeepsie, N. Y.—Edward C. Smith, 39 Market St., is preparing plans for the school to be erected at Poughkeepsie. The estimated cost is $75,000.

Belleville, N. J.—Charles Granville Jones, Arch., Belleville, is preparing plans for the erection of a high school at Belleville. The estimated cost is $106,000. Noted Sept. 3.

✚**Bradley Beach, N. J.**—The contract for constructing the addition to the Bradley Park school has been awarded to GEORGE W. HENDERSON, Avon, N. J., at $52,000. Other bidders were as follows: Herbert Gardner, Asbury Park, N. J., $54,807; Charles E. Preston, Monticello, N. Y., $54,150; Berry Goodwin Co., Philadelphia, Penn., $55,257.

✚**Elizabeth, N. J.**—The contract for construction of the school at Grove and Murray Sts. has been awarded to EDWARD M. WALDRON, INC., Newark, at $72,412.

Jersey City, N. J.—The lowest bid received for the erection of School No. 5, Merseles and Third St., has been submitted by W. H. and F. W. Cain, at $228,916. Noted Sept. 3.

Montclair, N. J.—Bids will be received, until Oct. 5, by Guilbert & Betelle, Archs., 665 Broad St., Newark, N. J., for the construction of the dormitory for the Russ Memorial Hall. The estimated cost is $90,000.

New Brunswick, N. J.—The Board of Education is having plans prepared for the construction of a high school. The estimated cost is $150,000.

Paterson, N. J.—The Board of Education is planning the erection of additions to Schools Nos. 6, 10 and 21. John R. Wilson is Supt.

Allentown, Penn.—The Board of Trustees of the Rittersville State Homeopathic Hospital, have adopted plans for the construction of buildings. An appropriation of $105,000 has been made.

Elizabethtown, Penn.—The Pennsylvania R.R. Co. contemplates constructing a station at Elizabethtown. The estimated cost is $40,000.

New Kensington, Penn.—S. F. Heckert, Arch., Bessemer Bldg., Pittsburgh, is preparing plans for the construction of a hospital for the Citizens General Hospital. The estimated cost is $50,000.

Pittsburgh, Penn.—Plans have been completed by Janssen & Abbott, Archs., Pittsburgh, for the construction of a three-story brick building for the Tuberculosis League, Bedford Ave. and Wandless Sts. The estimated cost is $50,000.

Wilkes-Barre, Penn.—Plans are being prepared by Sturtevant & Poggi, Archs., Coal Exchange Bldg., for a four-story brick and steel Masonic Temple at Wilkes-Barre. The estimated cost is $75,000.

✚**Wilkes-Barre, Penn.**—The contract for the erection of a two-story high school on Casey Ave. has beeen awarded to HERMAN MAILANDER, 169 Barney St., Wilkes-Barre. Owen McGlynn, Simon Long Bldg., is the Arch.

✚**Hagerstown, Md.**—The contract for the construction of the Maryland Theater has been awarded to G. B. McWOLF, Hagerstown, at $90,000. Noted June 4.

Alexandria, Va.—Bids will be received until Oct. 9, by Committee on Public Property and Commission on Schools, for constructing a high school on Cameron St. Noted Sept. 17.

Lexington, Va.—Bids wil be received, until Oct. 7, by Flournoy & Flournoy, Archs., Wilkins Bldg., Washington, D. C., for the construction of a three-story and basement, 220x80-ft. gymnasium. The estimated cost is $80,000.

Charleston, W. Va.—Bids will be received, about Oct. 25, by F. L. Packard, Arch., Hayden Bldg., Columbus, Ohio, for constructing a school. The estimated cost is $150,000.

✚**Spartanburg, S. C.**—The general contract for constructing the two-story city hall and jail has been awarded to L. E. PALMER, Augusta, Ga.

✚**Savannah, Ga.**—The contract for the erection of terminals at Savannah, for the Ocean Steampship Co., has been awarded to the PHOENIX CONSTRUCTION CO., New York, at $700,000.

Dunedin, Fla.—Bids will be received, until Oct. 6, by Dixie M. Hollis, Secy. Bd. of Pub. Instruction, for constructing a brick school at Dunedin.

Jacksonville, Fla.—The lowest bids for the erection of the jailer's residence, courthouse and jail, were submitted by W. P. Richardson & Co., Jacksonville, at $214,160, and $207,163, respectively. Noted Sept. 3.

✚**Miami, Fla.**—The contract for the construction of a high school has been awarded to ST. JOHN CONSTRUCTION CO., Miami, at $46,570. Noted May 21.

Panama City, Fla.—Bids will be received, until Oct. 5, by R. L. McKenzie, Chn., Bay County Comrs., for constructing the courthouse and jail. The estimated cost is $60,000.

✚**Tampa, Fla.**—The contract for the construction of the public library at Tampa has been awarded to AULICK, BATES & HADNELL, Tampa, at $47,565. Noted Sept. 3.

✚**Meridian, Miss.**—The contract for the construction of the city hall has been awarded to HANCOCK & MCARTHUR, at $88,000.

✚**Walthall, Miss.**—The general contract for the construction of the courthouse for the Webster County Commission has been awarded to the LITTLE CLECKLER CONSTRUCTION CO., Anniston, Ala., at $35,000. Noted Aug. 20.

✚**Paris, Ky.**—The contract for the construction of the Y. M. C. A. building has been awarded to CULLEN & VAUGHN, Hamilton, Ohio, at $45,000.

Ashtabula, Ohio—Bids were received, Sept. 24, by the Board of Education for constructing the new high school. The lowest bid was submitted by the Mayben-Frenchtel Co., Gadsen, Ala., at $147,278.

✚**Canal Dover, Ohio**—The contract for the construction of the proposed high school has been awarded by the city to the WENTZ CONSTRUCTION CO., Canal Dover, at $126,619. Howard & Merriam, Columbus, Ohio, are Archs. Noted July 16.

Cincinnati, Ohio—The Krug Realty Co., Cincinnati, plans to construct a nine-story office building on Walnut St. Estimated cost, $150,000.

Cincinnati, Ohio—Bids will be received until noon, Oct. 22, by William Leimann, City Audr., for the purchase of $100,000 of bonds for the purpose of enlarging, improving, equipping and furnishing the new general hospital.

✚**Cleveland, Ohio**—The contract has been awarded to the ROWLAND E. CURRY CO., 1900 Euclid Ave., Cleveland, for constructing the proposed three-story, fire-proof school, at $151,810. Walker & Weeks, Cleveland, are Archs.

✚**Cleveland, Ohio**—The contract for the construction of a new building at 7911 Detroit Ave., Cleveland, for the St. John's Hospital, has been awarded to the W. B. McALLISTER CO., 2163 East 31st St., Cleveland. Estimated cost, $125,000. W. S. Lougee, Marshall Bldg., is the Arch.

✚**Hamilton, Ohio**—The contract for constructing the temple for the B. P. O. E. of Hamilton has been awarded to W. C. HANDSKY & SON, Zanesville, Ohio, at $62,743.

✚**Medina, Ohio**—The Pythian Sisters have awarded the contract to RODERICK GRANT, Cleveland, Ohio, for constructing a new building at Medina. Estimated cost, $75,000. Kregelius & Robinson, Leader News Bldg., Cleveland, Ohio, are Archs. Noted July 23.

Oak Harbor, Ohio—Bids will be received until noon, Oct. 10, by the Adjutant-General, Columbus, Ohio, for the construction of an armory at Oak Harbor. B. L. Barger, Columbus, is Secy. State Armory Bd.

✚**Steubenville, Ohio**—Bids have been opened as follows for constructing a market house: Fitzsimmons & Co., $38,000; McFeeley Bros., $39,975; James Coyne, $37,415; GUY JOHNSON CO., $34,886 (awarded contract).

Terre Haute, Ind.—Contracts for the proposed vocational school here will be awarded about Oct. 15. Estimated cost, $150,000. MacLucas & Filton, Lemcke Annex, Indianapolis, Ind., are Archs. Noted Sept. 3.

DAM, CLINTON, MASS.

✚Bids were received Sept. 10, by the Water Commissioners, for the construction of a concrete dam at the Heywood Basin, from (A) Thomas A. Cassidy, Fitchburg; (B) R. H. NEWELL & N. S. BROCK, Uxbridge (awarded contract); (C) Walter L. Mellen, Worcester; (D) Murphy & Hennessy, Clinton; (E) Light, Heat & Power Corporation, Boston; (F) King Construction Co., Boston; (G) Ryan & Keon, Boston; (H) Hancock Engineering Co., Boston; (I) G. Rossi & Son, Leominster; (J) Clinton Concrete Co., Clinton. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J
600 cu.yd. clearing site for dam and sloping ground	$0.45	$0.45	$0.60	$0.50	$0.72	$2.00	$0.50	$0.90	$0.37	$0 40
380 cu.yd. earth excavation, in trench	0.45	1.00	0.80	1.00	0.79	3.00	0.50	1.00	0.90	1 00
100 cu.yd. rock excavation, in trench	4.00	4.00	3.25	4.00	4.50	7.00	3.00	4.85	3.00	3 80
2275 cu.yd. earth excavation for waste and discharge channel	0.45	0.50	0.65	0.325	0.66	0.60	0.50	0.85	0.60	0.35
115 cu.yd. rock excavation for waste and discharge channel	4.00	1.50	3.15	1.90	4.50	4.50	3.00	5.00	2.60	2 80
310 cu.yd. concrete masonry, Class A	9.00	8.00	13.27	7.75	10.80	10.35	12.50	11.76	8.00	8.10
360 cu.yd. concrete masonry, Class B	7.50	7.00	13.27	6.50	7.20	8.95	7.50	6.85	7.75	7 30
300 cu.yd. rubble masonry	5.25	5.00	5.04	4.75	6.60	5.25	5.50	4.38	5.00	4.50
8760 lb. reinforcing steel	0.045	0.05	0.04	0.035	0.048	0 025	0.05	0.05	0.05	0.037
310 lin.ft. 36-in. c.i. pipe	9.25	6.55	7.46	8.00	8.60	10.18	8.75	7.95	7.00	8.00
235 lin.ft. 18-in. c.i. pipe	5.00	2.70	2.83	2.50	2.87	4.87	3.25	5.10	6.00	2.55
1 36-in. sluice gate, 36-in. gate valve, 2 18-in. gate valves	1075.00	1025.00	1206.93	1550.00	1123.00	1030.24	1000.00	1200.00	990.00	1243.00
5750 cu.yd. earth fill	0.50	0.39	0.65	0.55	0.48	1.22	0.60	0.90	0.47	0.50
707 sq.yd. paving slope of dam	0.95	1.00	0.70	1.80	1.20	1.65	1.25	1.85	0.95	1.35
350 sq.yd. paving spillway and discharge channels	0.85	1.00	0.65	0.90	1.80	1.50	1.00	1.85	0.75	1.20
350 cu.yd. loaming top and lower slope of dam	1.75	1.00	0.60	0.50	0.60	1.00	1.75	1.25	0.45	0.40
Floor, door, windows and roof of gate house	250.00	350.00	385.00	225.00	300.00	227.00	350.00	600.00	400.00	205.00
Copper screens for gate house	105.00	100.00	91.86	275.00	58.00	121.00	150.00	100.00	100.00	96.00
Screen for inlet of discharge pipe	90.00	35.00	119.77	45.00	30.00	25.00	50.00	20.00	75.00	34.00
Extended totals	$19,803	$17,122	$23,034	$18,509	$20,842	$28,207	$21,258	$24,928	$18,675	$17,978

Detroit, Mich.—Revised plans have been completed by W. B. Stratton, Arch., Detroit, for the detention house to be constructed by Wayne County. Estimated cost, $200,000. All bids on original plans were rejected. Noted Aug. 22.

✝Detroit, Mich.—The Garden Court Realty Co. has awarded the contract to IRWIN & LEIGHTON, Detroit, for constructing the Garden Court apartment house. It will be a nine-story structure, of brick and stone.

Detroit, Mich.—Plans are being prepared by E. R. Dunlap, Arch., Detroit, for the nine-story concrete apartment house to be constructed at St. Aubin and Jefferson Aves., for Thatcher & Mellen, Detroit.

Detroit, Mich.—The congregation of Our Father, Detroit, will erect a new church at Cass and Prentiss Aves. Estimated cost, $110,000.

✝Detroit, Mich.—The general contract has been awarded to FRANK FARRINGTON, Detroit, for constructing the Majestic Theater, at $110,000.

Munising, Mich.—Charlton & Kuenzli, Camp Bldg., Milwaukee, Wis., are preparing plans for a grade school to be constructed at Munising. Bids will be received soon. Estimated cost, $75,000.

Chicago, Ill.—Bids will be received until Oct. 5, by J. B. Dibelka, State Arch., 29 South La Salle St., Chicago, for constructing an armory to cost $280,000.

✝Joliet, Ill.—The contract has been awarded to VICTOR AHLVIN, Joliet, for constructing the St. Cyril Methodist School at Elwood St. and Henderson Ave., at about $45,000.

✝Peoria, Ill.—The Board of School Inspectors has awarded the contract to R. IBEN, Peoria, for constructing the "Loucks" school, at $42,000.

Fond du Lac, Wis.—Plans are being completed by Allen D. Conover, Arch., Madison, Wis., for the building for the Woman's Industrial Home to be erected near Fond du Lac. Estimated cost, $200,000.

✝Menominee, Wis.—The contract has been awarded to JULIUS UTKE, Marinette, Wis., for constructing the proposed vocational education building at Menominee. Estimated cost, $50,000.

✝Watertown, Wis.—The Bank of Watertown has awarded the contract to FERDINAND BEHLKE, Watertown, for constructing its proposed new building. It will be two-story and basement, 83x45 ft. A. C. Clas, Milwaukee, Wis., is Arch.

Burlington, Iowa—Bids will be received until noon, Oct. 15, by the School Board for constructing two schools. Eckland & De Arment, Moline, Ill., are Archs.

Duluth, Minn.—Plans have been completed by F. W. Perkins, Arch., Chicago, Ill., and Duluth, Minn., for the residence to be constructed by Marcus L. Faye in the East End district.

St. Paul, Minn.—D. H. Bradley and L. T. Lefebre, St. Paul, will construct a seven-story store and office building. Estimated cost, $55,000.

✝St. Paul, Minn.—The contract has been awarded to GILBERTSON & TANBERG, Missoula, Mont., for the stone work on the 13-story railway exchange.

Independence, Kan.—The City Commissioners will call for an election soon to vote on the question of issuing bonds for a new city hall.

Dodson, Mont.—Dudley & Jones, Dodson, have engaged Link & Haire, Archs., Helena, Mont., to prepare plans for a $40,000 hotel to be constructed at Dodson.

Belleville, Mo.—The plans of the Public Library Board for the proposed library have been approved by the Carnegie Commission. Estimated cost, $45,000.

Carthage, Mo.—L. M. Thomas, County Clk., Carthage, will receive bids until 2 p.m., Oct. 14, for the construction of Jasper County almshouse as per plans and specifications of A. C. Michaels, Arch., 324 Miners' Bank Bldg., Joplin, Mo. Plans are also on file with the County Clerk.

Jefferson City, Mo.—The Central Missouri Trust Co., Jefferson City, has had plans prepared for a seven-story bank building.

Denison, Tex.—F. Whiteside, Arch., Denison, is preparing plans for the hotel to be constructed by the Terminal Hotel Co. on West Main St. It will be eight stories, 25x120 ft. Estimated cost, $80,000.

✝San Antonio, Tex.—The School Board has awarded the contract to the AREND & VOGEL CO., San Antonio, for constructing a manual training and domestic science high school, at $64,975. Noted Sept. 10.

✝Seattle, Wash.—The contract has been awarded to GILBERTSON & TANBERG, Missoula, Mont., for the stone work on the 11-story Stewart Building.

Spokane, Wash.—The Trustees of the University of Puget Sound plan to construct a building in Spokane. Estimated cost, $400,000.

✝Eugene, Ore.—The contract for the construction of the new two-story and basement administration building to be erected by the University of Oregon at Eugene has been awarded to the BOYAJOHN-ARNOLD Co., Portland, Ore., at $89,759. Plans were prepared by the State Architect, Salem, Ore. Noted Sept. 3.

✝Alhambra, Calif.—The contract has been awarded to H. F. ROBERTS, Alhambra, for constructing four schools. Allison & Allison, Los Angeles, Calif., are Archs.

Bids will be received until Oct. 7, by the Board of Trustees of the City High School District, for constructing three brick high schools. Norman F. Marsh, Broadway Central Bldg., Los Angeles, Calif., is Arch.

✝Lindsay, Calif.—The School Trustees have awarded the contract for the construction of a primary school building to HENRY GEDE & SONS, Fresno, Calif., at $41,343.

Longbeach, Calif.—H. H. Lochridge, Arch., of the Long Beach Improvement Co., is preparing revised plans for the Class A building to be erected at Pine St. and Ocean Ave. for Markwell Bros. The height of the building will be increased from four to eight stories. The cost is estimated at $350,000.

San Bernardino, Calif.—Bids will be received until 2 p.m. Oct. 7, by F. W. Conrad, Secy., High School District, for constructing a group of high school buildings. Anthony Beimer, 443 Third St., Los Angeles, Calif., is Supt. of Construction.

San Bernardino, Calif.—Bids will be received by the Board of Education until 2 p.m., Oct. 17, for the construction of the polytechnic high school. Estimated cost, $250,000.

San Bernardino, Calif.—The Supervisors of San Bernardino County have called an election for Oct. 20. The citizens will vote on the proposition to issue $150,000 in bonds for the construction of county hospital buildings.

San Francisco, Calif.—The city plans to construct a three-story and basement detention home to cost $50,000, on West Mission St. between Brady and 13th Sts.

San Francisco, Calif.—The Library Trustees have approved the plans for a new library to cost $1,000,000. The plans were prepared by George W. Kellman, Arch., Sharon Bldg., San Francisco.

San Francisco, Calif.—Carl Geilfuas, Arch., San Francisco, is preparing plans for a six-story and basement apartment house to be constructed on Powell St.

✝San Francisco, Calif.—The Board of Public Works has awarded a contract for the carpentry and mill work in the new city hall to MONSON BROS., San Francisco, at $197,586.

Venice, Calif.—B. Felix and associates, Venice, plan to construct a three-story brick building at Marine and Navy Sts. Estimated cost, $115,000.

Ventura, Calif.—Albert C. Martin, Arch., 430 Higgins Bldg., has completed plans for the new county hospital to be erected at Ventura. The plans have been approved by the State Board of Charities and bids will be asked at once by the Board of Supervisors. The building will be a two-story brick structure, 175x90 ft. Noted Sept. 24.

Lachine, Que.—J. E. Vian, Arch., Lachine, is preparing plans for the proposed city hall for Lachine. Estimated cost, $100,000.

Montreal, Que.—F. T. Jackalin, Jacobs Bldg., Montreal, is preparing plans for a theater to cost $60,000.

Toronto, Ont.—Bids will be asked soon by the Provincial Hydro-Electric Commission, Toronto, for the construction of the office building at 192 University Ave. W. W. Pope, Continental Life Bldg., Toronto, is Arch.

Regina, Sask.—Storey & Van Egmond, Archs., Regina, have prepared plans for a three-story store building to be constructed at Albert St. and 13th St. Estimated cost, $45,000.

✝Vancouver, B. C.—British Columbia University has awarded the contract to McLEAN & CO., 108 Pacific Block, Vancouver, for constructing the science building, at about $100,000.

Financiers Loyal to the Country's Welfare—John Skelton Williams, Comptroller of Currency, was recently the principal speaker before the Indiana Bankers' Association. An interesting point emphasized by Mr. Williams was the fact that at the present time the United States "is a Mount Ararat of a universe overwhelmed by a deluge of blood, of confusion and raging strife," and that the country stood upon the threshold of opportunity for that reason. In part, his speech was as follows:

"The Federal reserve act is not a measure which serves only banks and their customers, but it is destined, I firmly believe, to exert a powerful influence for good on the lives and fortunes of all classes of our population. It is the instrumentality through which the American people will be freed from the domination of a financial oligarchy. It restores to the channels of commerce and industry hundreds of millions of dollars of money which was drawn from the sections where it was most needed to lie idle in the vaults of the big banks in two or three cities, or else be loaned by those banks largely on demand loans in the stock market.

"It provides for a system to meet completely and effectively the requirements of expanding or contracting business according to the seasons and the varying conditions, and it accomplishes along the most natural lines, the mobilization of the bank reserves, and devises the methods by which they can be most safely and fairly utilized.

"It practically removes from honestly and capably managed banks all fears of runs or the dread of suspension or failure, by providing the means for quickly converting into currency the commercial paper in which its funds may have been invested.

"By the system of clearings which the bill provides for, it is estimated that several hundred million dollars heretofore kept in transit and in unavailable balances will be released for the needs of business, while the delay and expense of making collections of checks will both be eliminated.

"It opens the way for the establishment of branches of our national banks in foreign countries so as to secure for this country a larger share of the world's commerce. It removes the barrier which prevented the national banks from lending on real estate, and makes improved real estate acceptable as a basis for loans under conditions clearly and conservatively defined, so as to bring into active commercial use one of the most substantial of all securities.

"In its efforts to provide for present and to guard against further and future demands, the country has been steering a cautious course between two perils. Money enough for ordinary and extraordinary requirements incident to conditions unprecedented, and not only to move the crops, but to hold some crops, the normal demand for which was suspended, was urgently needed. Yet such inflation of the currency as might threaten our gold reserve and impair our public credit and the value of our money would be suicide. Self-preservation demands first the preservation of our credit. With that wounded, we would be unable to maintain ourselves; miserably powerless to help others, left impotent and feeble and shamed, while opportunity turned its back on us.

If we allowed the currency supply to become inadequate for our requirements, we might inflict the penalties of confiscation and ruin on the innocent many to the enrichment of the designing and remorseless few.

"If we should allow inflation of the currency away from safe and solid bases of actual and irreproachable value, we would be like a man drinking himself to frenzy and torpor while his honor and the safety of his home depended on his steadiness and strength. Therefore, we have felt and tested and studied and have striven to work and build swiftly but carefully; to act promptly, but with thoughtful provision for the situation as it is, while keeping alert eyes on the possibilities of the days and months to come.

"In this work all of us have united. It is deeply gratifying to me to be able to certify how much the country owes of its growing prospects and increasing stability to the genius, skill and generous, patient, broad patriotism of its bankers in all sections. Those of New York, Chicago and other large cities have been not only willing but zealous in coöperation and with valuable and timely service. Most of them have tendered their resources and their services to help the public interest. But the people of all grades and sections have, as a general rule, done what they could to forward a difficult and complicated labor.

"The administration has been given full cause to feel gratefully and exultingly that, when the common defense and the general welfare are involved, the free citizens of the United States have no lines of differences in politics, in sections, in social grades or the distribution of the favors of Fortune. The people, regardless of party, have given cordial and cheerful sanction to every movement and act approved by their reason as being for the good of the republic.

"The work of adjustment and of getting the machinery of business on perfect foundations and oiled and leveled is not completed; but it is well started with safe and efficient methods. We and our business machinery will be required to work not only for ourselves, but for the world. The task is enormous, but it is in conjunction necessarily. In protecting our own stability, we protect the world's finance and commerce. In conserving the interests of the other nations, we conserve our own and improve the opportunities that practically are forced upon us. Along with illimitable responsibilities, the prospect of illimitable expansion confronts us."

Trade with Brazil—In a recent issue of the "Daily Consular and Trade Reports," the following article on the present trade situation in Brazil, written by the consuls, appeared:

"As this is the dull season, about the only merchandise to be shipped consists of rubber, although it is possible that some green and sun-dried hides, which ordinarily go to Germany, will go forward, especially if arrangements can be made to fumigate the green hides, sacking them being out of the question on account of cost.

"Aside from this, the situation here is very complicated because of the lack of sufficient money with which to handle business, the uncertainties of the exchange market, which is largely in the hands of European bankers, and the increase in freight and insurance rates. Until these matters adjust themselves, it will be very difficult for merchants to do business, and especially with the United States, as there are no American banks or shipping companies. The steamship 'Purus,' which carries this dispatch, will leave here in a few days with a fair amount of rubber, most of which is billed to order and is in a measure an experimental shipment. The continuance of shipping in this way will depend upon the result of the sales in this instance.

"Notwithstanding the complicated banking situation, local collections for foreign account continue remarkably good, but orders for new goods will be limited in amount until it can be estimated where the exchange rate will establish itself. For this same reason, no doubt, American exporters are insisting upon cash with orders or guaranties.

"Anxiety as to future coal supplies is becoming more and more apparent as efforts to charter steamers continue to fail. One firm has offered as a special inducement to prepay freight, but to date has failed to arrange for a steamer. The prices of coal, $3.15 per ton, f.o.b. shipping port, is considered reasonable in view of the circumstances, and it is to be hoped that some means will be found to solve transportation difficulties.

"The daily papers have been most active in advising the local public of the action of American trade and commercial associations and their intentions as regards this market, and as much of our success in retaining this market depends upon the initial action of the American exporter, it is hoped that he will be able to fulfill the promises implied in the action taken by the associations.

"There is an excellent demand here at present, on account of the European war, for all staples, such as corn, flour, canned goods, smoked meats, beans, oil, prints, shoes, hats, hardware, coal, machinery, electrical supplies and drugs.

"Foodstuffs and almost everything else have already trebled in price since the beginning of the month. Coal is now selling at $40 per ton, but it is understood that the English Government has requisitioned all of the remaining supply that the two leading dealers at Pernambuco (both of whom are English) have on hand. The tramways and gas companies have enough coal to last six weeks only.

"Consul P. Merrill Griffith, Pernambuco, is at a loss to know just what arrangements can be made at present for the payment of merchandise ordered and shipped there, as the banks are all closed by order of the Brazilian Government, and have been for the last two weeks. It is reported that they will reopen soon, but indications are that there will be such a run that they may be forced to close within a short time. With New York houses having known and established representatives here, the situation is different, inasmuch as payments for goods ordered may be deferred indefinitely.

"The best way to send supplies to Pernambuco at present is by steamers flying neutral flags. The Lloyd Brazileiro intends to reëstablish its passenger service between New York and Brazil, which for some time has been discontinued.

"Sugar and cotton are the chief exports, and as this is one of the richest and most fertile sections of Brazil, sugar and cotton are chiefly raised. Nothing is being exported now, and the natives are beginning to realize how much they are dependent upon the outside world for supplies. Thousands are unemployed and many families are already suffering. There is little money and prices are very high. The Government of Argentina will not export any more flour, and the only source of such supplies for Brazil is the United States.

"Competent representatives thoroughly conversant with the customs and language of the people of this country should be sent out immediately if at all possible. Brazilians are not prejudiced against American goods at any time, and business connections can now be formed which may endure indefinitely."

Training Dye Makers—Under the direction of Dr. Allen Rodgers of Pratt Institute Brooklyn, a miniature factory has been set up to make American dyes from American raw materials. It is also proposed to train young men to become foremen of American dye factories.

In "American Industries" the official organ of the "National Association of Manufacturers." Harold Lambert Allen has printed a lengthy article from which the following extracts have been taken.

"Prior to the beginning of the European war it was not generally realized to what extent many industries of the United States are dependent on foreign supplies. We had grown accustomed to think of this country as the source of raw materials for European factories, rather than the consumer dependent on foreign products in a large measure for the maintenance of some of our largest industries—dyes for the textile, leather and paper trades. Although during the last five years the imports of dyestuffs into the United States have remained practically stationary, owing to the enlargement of the chemical works in the United States, we are dependent on Germany for such large quantities of dyestuffs that the stoppage of imports since the beginning of the war presents a serious problem to the consumers of those commodities.

"Figures obtained from official sources show that the total average purchases from abroad of alizarin and other coal tar colors have been about $10,000,000 annually during the past six years. In 1913 the total value of imported dye stuffs from all foreign countries was $10,395,744, including indigo and aniline salts. Of this amount Germany furnished $8,876,020, while during the unfinished year 1914, we have imported from that country artificial dye stuffs valued at $7,940,061, indicating that had the war not occurred the imports for both years would have been about equal. It is reasonable to assume that, had there been any great discrepancy between the imports of 1913 and 1914, they would have been larger this year, since we have already imported $5,965,537 worth of finished coal tar colors (not including alizarin, aniline salts or indigo) this year, in comparison with the somewhat smaller value of $5,766,600 of the same products during 1913. At all events it is obvious that the hiatus left in the American market by the war is not an inconsiderable one, and is large enough to present a serious problem to the textile and leather trades. Figures for 1913, the last complete year, as previously given, show the imports of foreign artificial dye stuffs to have been $10.395,744, and it is this amount that American manufacturers must now supply.

"The United States must have dyes. These must be either imported or manufactured in this country, and since the war has paralyzed the trade of Germany, from whom we obtain by far the largest supply of imported dyes, only one cargo having reached this country since the beginning of hostilities, Yankee ingenuity must come to the rescue. The solution is all American dyes for American manufactured goods. We must establish a dye manufacturing industry in the United States which will supply not only the demands of the home market, but which may compete successfully with other nations for the dye trade of the world. * * *

"In order to build up an American dye manufacturing industry that will supply all of the demands of the home market and compete succesfully with foreign manufacturers for the dye trade of the world, proper support must be given the industry by both the Government and the consumers. * * *

"The part the Government must play in upbuilding the dye industry is an important one. A sufficiently high tariff must be placed on dyes to insure American manufacturers against the destructive competition for foreign combinations when the war is over. The coal-tar color industry in the United States makes no plea for protection in the ground of fostering an infant industry, but sufficient protection should be given to prevent this county from being made the dumping ground for the overproduction of Germany. Unless this is done German manufacturers will be in a position to destroy the American coal-tar industry when the war is over, exactly as was done in the case of the hydrochinon industry.

"It must be remembered that even with chemists able to properly compound dyes great skill is necessary to their proper manufacture. The technical processes involved are exceedingly nice and considerable experience is necessary before the proper technique is acquired. In Grmany for many years the industrial schools have been training young men to assume responsible positions in dye factories, and in this country for a time some difficulty will likely be experienced in obtaining skilled labor. Foremost among American industrial schools to perceive the trend of the times is Pratt Institute in Brooklyn, N. Y. Under the direction of Dr. Allen Rodgers that institution has taken steps to install a miniature factory to manufacture all American dyes from all American raw products and train young men to become foremen in dye factories. It must be remembered that the dye industry, if greatly enlarged at all, will be placed on a permanent basis, and the importance of this experiment cannot be overestimated."

CATALOG NOTICES

Tate, Jones & Co., Inc., Pittsburgh, Penn. Catalog. Appliances for burning fuel oil. Illustrated, 32 pp., 8½x11 in.

Easton Car & Construction Co., Easton, Penn. Catalog. Industrial railway material and cars. Illustrated, 52 pp., 8x10½ in.

Weller Mfg. Co., Chicago, Ill. Catalog No. 25. Unit-system storage bins. Illustrated, 6x9 in.

Toch Bros., 320 Fifth Ave., New York. Catalog. Railroad and marine paints. Illustrated, 32 pp., 5x7 in.

Contracts to Be Let

Bids received until Oct. 7, 1914.

Trunk Sewer and Sewage Disposal Works

Plainfield, N. J.

Sealed proposals for constructing a trunk sewer and sewage disposal works will be received by the Joint Meeting of the Inhabitants of the City of Plainfield, the Borough of North Plainfield and the Borough of Dunellen, N. J., until eight o'clock P. M., October 7, 1914. Proposals should be delivered to C. M. Dolliver, Secretary of the Joint Meeting, 149 North Avenue, Plainfield, N. J., and may be either for the trunk sewer, Contract A, or the sewage disposal works, Contract B, or both separately.

Contract A comprises some 13,000 feet of 42-inch reinforced concrete sewer, 3,900 feet of inverted siphons, consisting of duplicate 20-inch cast-iron pipe lines, and about 5,000 feet of 8-inch force main.

Contract B is for the construction of a sewage disposal works comprising the following structures: 2 preliminary settling tanks of the Imhoff type, a sludge drying bed and automatic dosing devices, 2 sprinkling filter units with a combined area of stone bed of about 1¾ acres with a depth of 6 feet of stone, and double final settling tanks, similar in construction to the preliminary tanks There are also a small laboratory and sludge pumping station. The tanks, filter walls, etc., are to be built of reinforced concrete.

Proposals must be accompanied by a certified check on a National Bank or Trust Company for Twenty-five Hundred ($2,500.) Dollars for each contract bid upon.

The bidder to whom a contract is awarded will be required to execute same and furnish a surety company bond in the sum of Fifty (50%) Per Cent. of the amount of the contract within ten days (Sundays excepted) after receiving official notice of the award. The Joint Meeting reserves the right to reject any or all bids.

Plans and specifications may be obtained from George W. Fuller, Engineer, 170 Broadway, New York City, upon depositing Twenty-five ($25) Dollars, which will be refunded if said plans and specifications are returned in good condition within 30 days after bids have been received and acted upon by the said Joint Meeting.

Bids should be made on the Blank Form of Proposals bound with the specifications, and in case it is desired to bid on both contracts each bid should be made in a separate pamphlet

C. M. DOLLIVER,
Secretary.

Bids received until Oct. 6, 1914.

Vault Equipment

NOTICE TO CONTRACTORS.

Trenton, N. J.

Sealed proposals will be received at the office of the Comptroller, in the State House, Trenton, New Jersey, at twelve o'clock noon, October 6th, 1914, for furnishing for vaults in the office of the Secretary of State, in accordance with plans and specifications on file in the office of the Commissioner of Charities and Corrections, State House, Trenton, New Jersey.

Each bidder must accompany his proposal with a certified check for ten per centum of the amount of his proposal, payable to his order, properly endorsed, which will be returned to the unsuccessful bidder immediately following the award of the contract. The Commission reserves the right to reject any or all bids.

The successful bidder will be required to enter into a contract for the performance of the work with a bond of an approved security company for not less than one-half the amount of the contract price.

Proposals must be enclosed in envelopes sealed and marked "PROPOSALS FOR FURNISHING FOR VAULTS IN THE OFFICE OF THE SECRETARY OF STATE, TRENTON, NEW JERSEY," and addressed to the Comptroller, Hon. Edward I. Edwards, Secretary of the State House Commission.

Bids received until Oct. 8, 1914.

Steel Highway Bridge

THE SANITARY DISTRICT OF CHICAGO

Sealed proposals indorsed "PROPOSALS FOR ERECTION OF BACH ROAD BRIDGE" will be received by the Clerk of The Sanitary District of Chicago at the office of said District, Room 700, No. 910 South Michigan Avenue, Chicago, Illinois, until 12 M., standard time, on Thursday, October 8, 1914, and will be publicly opened by the Board of Trustees of said Sanitary District at a meeting to be held on that day or at the first meeting thereafter.

The work for which said tenders are invited consists of the ERECTION AND COMPLETION of the superstructure of the STEEL HIGHWAY BRIDGE across the Calumet-Sag Channel of The Sanitary District of Chicago on the line of BACH ROAD, situated in the Township of Palos, County of Cook, State of Illinois. The superstructure steel for said bridge will be furnished by the said Sanitary District and weighs one hundred and ten (110) tons more or less.

A deposit of THREE HUNDRED DOLLARS ($300.00) is required with each proposal.

All proposals must be made upon blank forms of proposal furnished by said Sanitary District, and shall be made in accordance with and to conform to all the terms and conditions set forth in "Requirements for Bidding and Instructions to Bidders" attached thereto.

Form of proposal, contract, specifications, and plans may be obtained upon application at the office of said Sanitary District. A deposit of Five Dollars ($5.00) will be required for each set of plans and specifications taken out. Said sum of Five Dollars ($5.00) so deposited, will be refunded by said Sanitary District upon the return of said plans and specifications to said Sanitary District, in good condition, provided same are returned within fifteen (15) days after the date on which said proposals are opened.

The Board of Trustees of said Sanitary District reserves the right to reject any or all proposals.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS A. SMYTH,
President of its Board of Trustees.

Attest:
JOHN McGILLEN, Clerk.
Chicago, September 28, 1914.

Bids received until Oct. 19, 1914.

Building Improvements

NOTICE TO CONTRACTORS: Sealed proposals for construction of a Rear Porch on the Principal's Residence, Interior Telephones, Clocks, Program Bells and Fire Alarm System for the State Normal School, Buffalo, N. Y., will be received by Dr. Thomas E. Finegan, Assistant Commissioner for Elementary Education, Education Building, Albany, N. Y., until twelve o'clock noon, Monday, October 19th, 1914, when they will be publicly opened and read. Proposals shall be inclosed in an envelope furnished by the State Architect and shall be accompanied by certified check in the sum of 5% of the amount of bid and the contractors to whom the awards are made will be required to furnish surety company bonds in the sum of 50% of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 2049 and 2026. The right is reserved to reject any or all bids. Drawings and specifications may be consulted at the New York Office of the Department of Architecture, Room 1224 Woolworth Building, at the office of the Department of Architecture, Capitol, Albany, N. Y., and at the Buffalo State Normal School, Buffalo, N. Y. Drawings and specifications may be obtained at the Department of Architecture, Capitol, Albany, N. Y., on reasonable notice to and in the discretion of the State Architect, Lewis F. Pilcher, Capitol, Albany, N. Y.